#### SUPPORTING STATEMENT FOR THE FALL PROTECTION SYSTEMS CRITERIA AND PRACTICES (29 CFR 1926.502) AND TRAINING REQUIREMENTS (29 CFR 1926.503)<sup>1</sup> OFFICE OF MANAGEMENT AND BUDGET (OMB) CONTROL NO. 1218-0197 (December 2016)

#### 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 (OSH 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 OSH Act specifically authorizes "the development and promulgation of occupational safety and health standards" (29 U.S.C. 651). In addition, the OSH 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).

Under the authority granted by the OSH Act, the Occupational Safety and Health Administration (OSHA) published the construction standards on Fall Protection Systems Criteria and Practices (29 CFR 1926.502) and Training Requirements (29 CFR 1926.503) to protect workers from construction workplace fall hazards. Items 2 and 12 below list and describe the specific information collection requirements of these standards.

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

The standard on Fall Protection Systems Criteria and Practices (29 CFR 1926.502) ensures that employers provide required fall protection for their workers working in the construction industry. The Standard recognizes the vast variation in construction fall hazards and accordingly includes several optional solutions. Depending on job-site conditions, employers may choose to comply with requirements for guardrail systems, safety-net systems, personal fall arrest systems, positioning device systems, warning line systems, safety monitoring systems or controlled access zones, and combinations of these abatement strategies. In further recognition of the flexibility needed to address fall hazards in construction, specific standards include optional components. Additionally the standards require hole covers, protection from falling objects and fall protection

<sup>1</sup>The purpose of this Supporting Statement is to analyze and describe the burden hours and costs associated with provisions of this Standard that contain paperwork requirements; this Supporting Statement does not provide information or guidance on how to comply with, or how to enforce, the Standard.

plans. In order to ensure the options provide workers their full measure of fall protection, the Standard requires the employer to prepare certifications. Accordingly, the Standard has the following paperwork requirements: Paragraphs (c)(4)(ii) and (k) of 29 CFR 1926.502, specify certification of safety nets and development of fall protection plans, respectively.

Safety-net use is a fall protection option available to construction employers. Paragraph (c)(4)(ii) of 29 CFR 1926.502, which addresses the certification of safety nets, is an option within the option to use these nets. This paragraph is available to employers choosing to use nets who demonstrate that performing a drop test on safety nets is unreasonable. This provision allows such employers to certify that their safety nets and the installation of these nets protect workers at least as well as safety nets that have met the drop-test criteria. The employer must complete the certification process prior to using such a net for fall protection, and the certificate must include the following information: Identification of the net and the type of installation used for the net; the date that the certifying party determined that the net and its installation would meet the drop-test criteria specified by the Standard; and the signature of the party making this determination. The most recent certificate must be available at the jobsite for inspection, thereby providing a means for workers and OSHA compliance officers to verify that the safety net and its installation comply with the impact requirements of the Standard. The use of safety nets, not to be confused with debris nets designed only to trap debris, has declined in construction due to the increased efficiency of computer aided fall protection preplanning and technical improvements in personal fall arrest and guardrail systems as well as significant advances in elevated access technology. Increasingly, project owners and insurance carriers are requiring that all workers use conventional fall protection, primarily personal fall arrest systems, on their construction projects or access precarious locations using alternate technology, e.g. scaffolds, aerial platforms, or ladders.

The fall protection plans specified in paragraph (k) of 29 CFR 1926.502 are available as an option to employers who have workers engaged in leading-edge work, precast-concrete-erection work, or residential construction work and who do not use alternate access technology or task scheduling to abate the fall hazards. To exercise this option, these employers must provide evidence that using only conventional fall protection systems is infeasible or is more hazardous than the fall protection alternative described in the plan. The employer must ensure that: A "qualified<sup>2</sup>" person prepares an up-to-date plan for a specific jobsite; a copy of the current, approved plan is at the jobsite; a "competent person"<sup>3</sup> supervises implementation of the plan; and the qualified person approves any revisions made to the plan, including revisions made to the plan as a result of investigating a fall, or serious fall-related incident as required by paragraph

<sup>&</sup>lt;sup>2</sup> Paragraph (m) of §1926.32 provides that "qualified" "means one who, by possession of a recognized degree, certificate, or professional standing, or who by extensive knowledge, training, and experience, has successfully demonstrated [the] ability to solve or resolve problems relating to the subject matter, the work, or the project."

<sup>&</sup>quot;<sup>3</sup>Paragraph (f) of §1926.32 provides that a "competent person" is one who is capable of identifying existing and predictable hazards in the surroundings or working conditions which are unsanitary, hazardous, or dangerous to workers, and who has authorization to take prompt corrective measures to eliminate them."

(k)(10) of this Standard. In addition, the employer must ensure that the plan: Documents the basis for determining that conventional fall protection equipment is infeasible or is more hazardous than the fall protection alternative; includes a discussion of other measures (such as alternate access technology, task scheduling) that the employer will take to reduce or eliminate the fall hazard for workers who do not use conventional fall protection systems; identifies each jobsite location where the employer cannot use conventional fall protection systems, and designates these locations as controlled access zones; and provides the name or other identifier for each worker authorized to work in a controlled access zone. The Agency has identified three trends that have lessened industry reliance on the fall protection plan option. Computer aided project-based fall protection design improvements make conventional fall protect increasingly efficient and effective. (Project owners and insurance carriers increasingly mandate what is called "100% tie-off" for elevated workers on their projects.) Technical advances make alternate access more efficient and safer (Improved scaffold systems and aerial platforms provide much safer less fatiguing access to precarious locations). Task scheduling and work flow improvements completely eliminate many fall hazards (Roof sections, even whole roofs, are constructed on the ground and hoisted into place.).

The training certification requirement specified in paragraph (b) of 29 CFR 1926.503 documents the training provided to workers potentially exposed to fall hazards. In this regard, a competent person must train these workers to recognize fall hazards and in the use of procedures and equipment that minimize these hazards.<sup>4</sup> An employer must verify compliance with this training requirement by preparing and maintaining a written certification record that contains the: Name or other identifier of the worker receiving the training; the date(s) of the training; and the signature of the competent person who conducted the training or the signature of the employer.<sup>5</sup> Under paragraph (c) of this Standard, employers must retrain workers who they have reason to believe do not have the required understanding and skills. In this regard, employers must provide retraining when: Changes occur in the workplace or in the types of fall protection systems or equipment that are sufficient to render the previous training obsolete; or inadequacies in a worker's knowledge or use of fall protection systems or equipment indicate that the worker has not retained the requisite understanding or skill. It is the Agency's understanding that fall

<sup>&</sup>lt;sup>4</sup>Paragraph (a)(2) of this provision requires employers to ensure that its competent person is qualified in the following areas: the nature of fall hazards present at the worksite; correct procedures for erecting, maintaining, disassembling, and inspecting the fall protection systems that workers will use; the use and operation of guardrail systems, personal fall arrest systems, safety-net systems, warning-line systems, safety-monitoring systems, controlled-access zones, and other protections that workers will use; the functions of workers in the fall protection plan, including their functions in safety-monitoring systems when used; the limitations on the use of mechanical equipment during the performance of roofing work on low-sloped roofs; the correct procedures for handling and storing fall protection equipment and materials, and for erecting overhead protection; and is qualified in the standards contained in subpart M ("Fall protection)."

<sup>.&</sup>lt;sup>5</sup>This provision allows an employer, who relies on training conducted by another employer or on training that a worker completed prior to the effective date of these standards, to enter the date on the certificate on which the employer determined that the prior training met the requirements of this provision. 5

protection training is done on a cyclic or as needed basis for groups of workers rather than done for each worker.

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 improved information technology when establishing and maintaining the required records. OSHA wrote the paperwork requirements of these standards in performance-oriented language, i.e., in terms of <u>what</u> data to collect, not <u>how</u> to collect the data.

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

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

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

The information collection requirements of these standards do not have a significant impact on a substantial number of small entities.

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

OSHA standards recognize several methods of addressing construction fall hazards including options for some listed methods. The standards ensure that employers, exercising certain fall protection options (safety-nets, fall protection plans), provide required fall protection for their workers. The standards also recognize the broad requirement for fall protection training. Therefore, these standards require that employers:

• certify safety-nets and their installations, if they demonstrate that it is unreasonable to conduct drop tests on the safety-nets and their installations;

• develop fall protection plans, if they perform leading-edge work, precast-concrete-erection work, or residential construction, and only after providing evidence that using conventional fall protection equipment is infeasible or creates a greater hazard; and,

• certify training records that demonstrate that their workers can identify fall hazards and know how to use fall protection procedures and equipment to minimize these hazards.

OSHA believes that these requirements are necessary to verify that employers are providing workers with protection from fall hazards as required by these standards.

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-inaid, or tax records for more than three years;
- in connection with a statistical survey, that is not designed to produce valid and reliable results that can be generalized to the universe of study;
- requiring the use of a statistical data classification that has not been reviewed and approved by OMB;
- that includes a pledge of confidentiality that is not supported by authority established in statute or regulation, that is not supported by disclosure and data security policies that are consistent with the pledge, or which unnecessarily impedes sharing of data with other agencies for compatible confidential use; or
- requiring respondents to submit proprietary trade secret, or other confidential information unless the agency can demonstrate that it has instituted procedures to protect the information's confidentiality to the extent permitted by law.

No special circumstances exist that require employers to collect information in the manner, or using the procedures, described in this Item.

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.

Pursuant to the Paperwork Reduction Act of 1995 (44 U.S.C. 3506(c)(2)(A)), OSHA published a notice in the *Federal Register* on September 30, 2016 (81 FR 67397) soliciting comments on its proposal to extend the Office of Management and Budget's (OMB) approval of the information collection requirements specified by the Standards on Fall Protection Systems Criteria and Practices (29 CFR 1926.502), and Training Requirements (29 CFR 1926.503). This notice was part of a preclearance consultation program that provided the general public and government agencies with an opportunity to comment. The Agency received one comment in response to this notice.

OSHA has consulted with noted members of the industry's safety and health profession. The Agency's sense, and that of those consulted, is that personnel safety net use in construction, continues to decline with notable exceptions for several reasons. (Complex to install test or certify; conventional fall arrest system improvements make their use more efficient (guard rails and fall arrest systems); Alternate access and task scheduling reduces fall hazard exposures.) As with net certification and fall protection plans, training certification burden hours have declined because of the lasting slump in construction employment. The Agency will continue to explore data sources, and review any comments prior to finalizing the supporting statement for submission to OMB.

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

The Agency will <u>not</u> 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 in these standards do not require the collection of confidential information.

11. Provide additional justification for any questions of a sensitive nature, such as sexual behavior and attitudes, religious beliefs, and other matters that are commonly considered private. This justification should include the reason 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 paperwork requirements specified in these standards do not require the 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 inactivity, size, or complexity, show the range of estimated hour burden, and explain the reasons for the variance. Generally, estimates should not include burden hours for customary and usual business practices.
- If this request for approval covers more than one form, provide separate hour burden estimates for each form and aggregate the hour burdens.
- 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 14.

#### **Burden-hour and Cost Determinations**

**Burden hour determinations**: In analyzing the information collection requirements for construction fall protection and training, OSHA relied on the latest 2013 SUSB Annual Data Tables by Establishment Industry, (U.S. 6-digit NAICS spreadsheet) U.S. Department of Commerce, U.S. Census Bureau, http://www.census.gov/data/tables/2013/econ/susb/2013-susb-annual.html . The Annual Data Tables includes establishment and worker population data distinguished by six digit North American Industrial Classification Systems (NAICS) Codes. OSHA relies on the latest series available for industry 23, "Construction." Appendices A-C to this supporting statement detail which NAICS construction industries are affected by safety net/safety net installation certification, fall protection plans, and fall protection training certification.

#### **Cost Determinations:**

The Agency determined average wage rates using the following hourly wage from the *Occupational Employment and Wages, December 2015 Occupational Employment Statistics,* Bureau of Labor Statistics, U.S. Department of Labor.

http://www.bls.gov/oes/current/oes\_nat.htm on the mean hourly wage rate of \$32.13 for a First Line Supervisor/(Competent Person) of Construction Trades and Extraction Workers (OES Code:471011) (http://www.bls.gov/oes/current/oes471011.htm including fringe benefits 31.4 percent *Employer Cost for Employee Compensation News Release (December 2015, Bureau of Labor Statistics*, U.S. Department of Labor, (http://www.bls.gov/news.release/ecec.nr0.htm)for fringe benefits; this figure represents the average level of fringe benefits in the private sector:

First Line-Supervisor: \$42.13

#### Certification of Safety Nets and Safety-Net Installations (§ 1926.502(c)(4)(ii))

OSHA estimates that, each year, 977 construction employers will choose to use and certify safety nets and safety-net installations instead of performing drop tests (See Appendix A). Nets still remain a significant choice for fall protection during bridge erection, repair and painting; they also are used when wide open spaces must be spanned. Of the employers choosing to use safety nets only some will choose to certify worthiness rather than drop test the nets. The Agency is aware that technology and practice will adjust this estimate, but in anticipation of market recovery and dwindling net use the Agency calculates that half the steel erectors will choose this option. This percent includes a few other employers who will continue net usage. The Agency; therefore, estimates that net certifications will require a designated competent person 5 minutes (.08 hour) to prepare the certificate annually. Therefore, the total burden hours and cost for this requirement are:

**Burden hours**: 977 net certifications x .08 hour = 78 hours **Cost**: 78 hours x \$42.13 = \$3,286

#### Fall Protection Plan (§ 1926.502(k))

The Agency estimates that the frequency of the fall protection-plan option in construction has fallen considerably due to the increased sophistication of fall protection equipment. However, for those employers who still opt to use a fall protection plan, the sample fall protection plan found in subpart M ("Fall Protection"), Appendix E provides them an expedient means for creating a plan electronically or even with "paper and pencil." OSHA estimates that 760 establishments who have workers engaged in leading-edge work, precast-concrete-erection work, or residential construction will use the fall protection option (See Appendix B). OSHA assumes that a competent person requires one hour developing a plan for a specific work site. Therefore, the total burden hours and cost for this requirement are:

Burden hours: 760 plans x 1 hour = 760 hours Cost: 760 hours x \$42.13= \$32,019

#### Certification of Training (§ 1926.503(b))

OSHA estimates that 354,172 construction establishments will require fall protection training and retraining each year for their workers (See Appendix C). The Agency recognizes that fall protection training is not individualized but presented to groups of workers at cyclic or regular intervals. For purposes of calculating burden hours and costs, the Agency believes each employer may average 15 such presentations a year. Certification of the training sign-in roster is the usual form of certification. Accordingly, OSHA estimates that there will be 5,312,580 construction fall protection training sessions per year. The Agency assumes that a competent person takes 5 minutes (.08 hour) to prepare each training certification. Therefore, the total burden hours and cost for this requirement are:

Burden hours: 5,312,580 certifications x .08 hour = 425,006 hours Cost: 425,006 hours x \$42.13= \$17,905,503

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 item 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 services component. The estimates should take into account costs associated with generating, maintaining, and disclosing or providing the information. Include descriptions of methods used to estimate major cost factors including system and technology acquisition, expected useful life of capital equipment, the discount rate(s), and the time period over which costs will be incurred. Capital and start-up costs include, among other items, preparations for collecting information such as purchasing computers and software; monitoring, sampling, drilling and testing equipment; and record storage facilities.
- If cost estimates are expected to vary widely, agencies should present ranges of cost burdens and explain the reasons for the variance. The cost of purchasing or contracting out information collection services should be a part of this cost burden estimate. In developing cost burden estimates, agencies may consult with a sample of respondents (fewer than 10), utilize the 60-day pre-OMB submission public comment process and use existing economic or regulatory impact analysis associated with the rulemaking containing the information collection, as appropriate.
- Generally, estimates should not include purchases of equipment or services, or portions thereof, made: (1) Prior to October 1, 1995; (2) to achieve regulatory compliance with requirements not associated with the information collection; (3) for reasons other than to provide information or keep records for the government; or (4) as part of customary and usual business or private practices.

Item 12 lists the total cost to employers of complying with the information collection requirements specified in these standards.

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), 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 single table.

There is no cost to the Federal Government associated with this information collection requests.

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

The Agency requests an adjustment decrease of 31,264 hours. The reduction results from a lower estimate of employers who must comply with the collections of information, and the Agency's determination that information exchanged during an OSHA compliance inspection is not covered by the PRA.

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 of information, completion of the

report, publication dates, and other actions.

OSHA will not publish the information collected under these standards.

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

OSHA lists current valid control numbers in §§1910.8, 1915.8, 1917.4, 1918.4 and 1926.5 and publishes the expiration date in a Federal Register notice announcing OMB approval of the information collection requirements (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.

# Table 1

#### **Summary of Burden Hour Adjustments**

| Collection of Information   | Current Burden<br>Hours | Requested<br>Burden Hours | Adjustments | Reason for Adjustment  | Number of<br>Responses |
|---|-------------------------|---------------------------|-------------|--|------------------------|
| Certification of Safety Nets and Safety-Net<br>Installations 1926.502(c)(4)(ii) | 179                     | 78                        | -101        | The reduction results<br>from fewer construction<br>employers choosing to<br>use and certify safety<br>nets and safety-net<br>installations instead of<br>performing drop tests. | 977                    |
| Fall Protection Plan – 1926.502(k)  | 963                     | 760                       | -203        | The number of employers<br>opting to use a fall<br>protection plan was<br>reduced.   | 760                    |
| Certification of Training – 1926.503(b)   | 455,166                 | 425,006                   | -30,160     | The reduction results<br>from fewer<br>establishments requiring<br>training and retraining<br>each year for their<br>workers.  | 5,312,580              |
| Federal Access to Records   | 800                     | 0                         | -800        | PRA does not cover<br>information exchange<br>during an OSHA<br>inspection; therefore, the<br>Agency has deleted the<br>burden hours.  | 0                      |
| Totals  | 457,108                 | 425,844                   | -31,264     |  | 5,314,317              |

|                       | Appendix A: Certification of Safety Nets and Safety Net Installation .502(c)(4)(ii)                       |                                |  |                              |                                       |  |  |  |
|-----------------------|---|--------------------------------|--|------------------------------|---------------------------------------|--|--|--|
|                       | Fall Protection Systems Criteria and Practices (29 CFR part 1926, subpart M)<br>OMB Control No. 1218-0197 |                                |  |                              |                                       |  |  |  |
| 2012<br>NAICS<br>code | Meaning of 2012 NAICS code  | Number<br>of<br>establishments | Average number<br>of construction<br>workers | % Establishments<br>Affected | Total Affected<br>(Number times<br>%) |  |  |  |
| 236115                | New single-family general contractors   | 48,145                         | 158,732                                      | 0.000%                       | 0                                     |  |  |  |
| 236116                | New multifamily housing<br>construction (except operative<br>builders)                                    | 2,707                          | 27,000                                       | 0.025%                       | 1                                     |  |  |  |
| 236117                | New housing operative builders  | 13,686                         | 88,721                                       | 0.025%                       | 3                                     |  |  |  |
| 236118                | Residential remodelers  | 90,959                         | 283,512                                      | 0.025%                       | 23                                    |  |  |  |
| 236210                | Industrial building construction  | 3,180                          | 77,623                                       | 0.500%                       | 16                                    |  |  |  |
| 236220                | Commercial and institutional building construction  | 37,882                         | 484,647                                      | 0.500%                       | 189                                   |  |  |  |
| 237110                | Water and sewer line and related structures construction  | 11,159                         | 148,640                                      | 0.025%                       | 3                                     |  |  |  |
| 237120                | Oil and gas pipeline and related structures construction  | 2,093                          | 163,057                                      | 0.025%                       | 1                                     |  |  |  |
| 237130                | Power and communication line<br>and related structures<br>construction                                    | 5,903                          | 206,596                                      | 0.025%                       | 1                                     |  |  |  |

|                       | Appendix A: Certification of Safety Nets and Safety Net Installation .502(c)(4)(ii)                       |                                |  |                              |                                       |  |  |  |
|-----------------------|---|--------------------------------|--|------------------------------|---------------------------------------|--|--|--|
|                       | Fall Protection Systems Criteria and Practices (29 CFR part 1926, subpart M)<br>OMB Control No. 1218-0197 |                                |  |                              |                                       |  |  |  |
| 2012<br>NAICS<br>code | Meaning of 2012 NAICS code  | Number<br>of<br>establishments | Average number<br>of construction<br>workers | % Establishments<br>Affected | Total Affected<br>(Number times<br>%) |  |  |  |
| 237210                | Land subdivision  | 5,551                          | 23,387                                       | 0.000%                       | 0                                     |  |  |  |
| 237310                | Highway, street, and bridge construction  | 10,121                         | 250,457                                      | 0.100%                       | 10                                    |  |  |  |
| 237990                | Other heavy and civil engineering construction  | 4,238                          | 84,853                                       | 0.100%                       | 4                                     |  |  |  |
| 238110                | Poured concrete foundation and structure contractors  | 18,745                         | 173,843                                      | 0.100%                       | 19                                    |  |  |  |
| 238120                | Structural steel and precast concrete contractors   | 3,282                          | 59,715                                       | 20.000%                      | 656                                   |  |  |  |
| 238130                | Framing contractors   | 10,135                         | 61,852                                       | 0.025%                       | 3                                     |  |  |  |
| 238140                | Masonry contractors   | 17,928                         | 119,042                                      | 0.025%                       | 4                                     |  |  |  |
| 238150                | Glass and glazing contractors   | 5,409                          | 45,532                                       | 0.000%                       | 0                                     |  |  |  |
| 238160                | Roofing contractors   | 17,355                         | 145,487                                      | 0.250%                       | 43                                    |  |  |  |

|                       | Appendix A: Certification of Safety Nets and Safety Net Installation .502(c)(4)(ii)                       |                                |  |                              |                                       |  |  |  |
|-----------------------|---|--------------------------------|--|------------------------------|---------------------------------------|--|--|--|
|                       | Fall Protection Systems Criteria and Practices (29 CFR part 1926, subpart M)<br>OMB Control No. 1218-0197 |                                |  |                              |                                       |  |  |  |
| 2012<br>NAICS<br>code | Meaning of 2012 NAICS code  | Number<br>of<br>establishments | Average number<br>of construction<br>workers | % Establishments<br>Affected | Total Affected<br>(Number times<br>%) |  |  |  |
| 238170                | Siding contractors  | 7,277                          | 28,477                                       | 0.000%                       | 0                                     |  |  |  |
| 238190                | Other foundation, structure,<br>and building exterior<br>contractors                                      | 5,181                          | 42,471                                       | 0.000%                       | 0                                     |  |  |  |
| 238210                | Electrical contractors and other wiring installation contractors  | 70,471                         | 709,731                                      | 0.000%                       | 0                                     |  |  |  |
| 238220                | Plumbing, heating, and air-<br>conditioning contractors   | 93,508                         | 840,511                                      | 0.000%                       | 0                                     |  |  |  |
| 238290                | Other building equipment contractors  | 6,908                          | 129,936                                      | 0.000%                       | 0                                     |  |  |  |
| 238310                | Drywall and insulation contractors  | 17,053                         | 193,199                                      | 0.000%                       | 0                                     |  |  |  |
| 238320                | Painting and wall covering contractors  | 31,296                         | 166,035                                      | 0.000%                       | 0                                     |  |  |  |
| 238330                | Flooring contractors  | 13,708                         | 61,796                                       | 0.000%                       | 0                                     |  |  |  |
| 238340                | Tile and terrazzo contractors   | 8,660                          | 44,400                                       | 0.000%                       | 0                                     |  |  |  |

|                       | Appendix A: Certification of Safety Nets and Safety Net Installation .502(c)(4)(ii)                       |                                |  |                              |                                       |  |  |  |
|-----------------------|---|--------------------------------|--|------------------------------|---------------------------------------|--|--|--|
|                       | Fall Protection Systems Criteria and Practices (29 CFR part 1926, subpart M)<br>OMB Control No. 1218-0197 |                                |  |                              |                                       |  |  |  |
| 2012<br>NAICS<br>code | Meaning of 2012 NAICS code  | Number<br>of<br>establishments | Average number<br>of construction<br>workers | % Establishments<br>Affected | Total Affected<br>(Number times<br>%) |  |  |  |
| 238350                | Finish carpentry contractors  | 25,851                         | 110,773                                      | 0.000%                       | 0                                     |  |  |  |
| 238390                | Other building finishing contractors  | 6,437                          | 57,915                                       | 0.000%                       | 0                                     |  |  |  |
| 238910                | Site preparation contractors  | 33,867                         | 285,513                                      | 0.000%                       | 0                                     |  |  |  |
| 238990                | All other specialty trade contractors   | 29,788                         | 196,728                                      | 0.000%                       | 0                                     |  |  |  |
|                       |   |                                |  |                              | 977                                   |  |  |  |

|               | Appendix B: Fall Protection Plans .501(b)(2), (12), (13)  |                |                                |                  |                                 |  |  |  |
|---------------|---|----------------|--------------------------------|------------------|---------------------------------|--|--|--|
|               | Fall Protection Systems Criteria and Practices (29 CFR part 1926, subpart M)<br>OMB Control No. 1218-0197 |                |                                |                  |                                 |  |  |  |
| 2012<br>NAICS |   | Number<br>of   | Average number of construction | % Establishments | Total Affected<br>(Number times |  |  |  |
| code          | Meaning of 2012 NAICS code  | establishments | workers                        | Affected         | %)                              |  |  |  |
| 236115        | New single-family general contractors   | 48,145         | 158,732                        | 0.050%           | 24                              |  |  |  |
| 236116        | New multifamily housing<br>construction (except operative<br>builders)                                    | 2,707          | 27,000                         | 0.050%           | 1                               |  |  |  |
| 236117        | New housing operative builders  | 13,686         | 88,721                         | 0.025%           | 3                               |  |  |  |
| 236118        | Residential remodelers  | 90,959         | 283,512                        | 0.025%           | 23                              |  |  |  |
| 236210        | Industrial building construction  | 3,180          | 77,623                         | 0.000%           | 0                               |  |  |  |
| 236220        | Commercial and institutional building construction  | 37,882         | 484,647                        | 0.025%           | 9                               |  |  |  |
| 237110        | Water and sewer line and related structures construction  | 11,159         | 148,640                        | 0.000%           | 0                               |  |  |  |
| 237120        | Oil and gas pipeline and related structures construction  | 2,093          | 163,057                        | 0.000%           | 0                               |  |  |  |
| 237130        | Power and communication line<br>and related structures<br>construction                                    | 5,903          | 206,596                        | 0.000%           | 0                               |  |  |  |

|                       | Appendix B: Fall Protection Plans .501(b)(2), (12), (13)  |                                |  |                              |                                       |  |  |  |
|-----------------------|---|--------------------------------|--|------------------------------|---------------------------------------|--|--|--|
|                       | Fall Protection Systems Criteria and Practices (29 CFR part 1926, subpart M)<br>OMB Control No. 1218-0197 |                                |  |                              |                                       |  |  |  |
| 2012<br>NAICS<br>code | Meaning of 2012 NAICS code  | Number<br>of<br>establishments | Average number<br>of construction<br>workers | % Establishments<br>Affected | Total Affected<br>(Number times<br>%) |  |  |  |
| 237210                | Land subdivision  | 5,551                          | 23,387                                       | 0.000%                       | 0                                     |  |  |  |
| 237310                | Highway, street, and bridge construction  | 10,121                         | 250,457                                      | 0.050%                       | 5                                     |  |  |  |
| 237990                | Other heavy and civil engineering construction  | 4,238                          | 84,853                                       | 0.000%                       | 0                                     |  |  |  |
| 238110                | Poured concrete foundation and structure contractors  | 18,745                         | 173,843                                      | 0.025%                       | 5                                     |  |  |  |
| 238120                | Structural steel and precast concrete contractors   | 3,282                          | 59,715                                       | 0.050%                       | 2                                     |  |  |  |
| 238130                | Framing contractors   | 10,135                         | 61,852                                       | 2.500%                       | 253                                   |  |  |  |
| 238140                | Masonry contractors   | 17,928                         | 119,042                                      | 0.000%                       | 0                                     |  |  |  |
| 238150                | Glass and glazing contractors   | 5,409                          | 45,532                                       | 0.000%                       | 0                                     |  |  |  |
| 238160                | Roofing contractors   | 17,355                         | 145,487                                      | 2.500%                       | 434                                   |  |  |  |
| 238170                | Siding contractors  | 7,277                          | 28,477                                       | 0.000%                       | 0                                     |  |  |  |

|                       | Appendix B: Fall Protection Plans .501(b)(2), (12), (13)  |                                |  |                              |                                       |  |  |  |
|-----------------------|---|--------------------------------|--|------------------------------|---------------------------------------|--|--|--|
|                       | Fall Protection Systems Criteria and Practices (29 CFR part 1926, subpart M)<br>OMB Control No. 1218-0197 |                                |  |                              |                                       |  |  |  |
| 2012<br>NAICS<br>code | Meaning of 2012 NAICS code  | Number<br>of<br>establishments | Average number<br>of construction<br>workers | % Establishments<br>Affected | Total Affected<br>(Number times<br>%) |  |  |  |
| 238190                | Other foundation, structure, and building exterior contractors  | 5,181                          | 42,471                                       | 0.000%                       | 0                                     |  |  |  |
| 238210                | Electrical contractors and other wiring installation contractors  | 70,471                         | 709,731                                      | 0.000%                       | 0                                     |  |  |  |
| 238220                | Plumbing, heating, and air-<br>conditioning contractors   | 93,508                         | 840,511                                      | 0.000%                       | 0                                     |  |  |  |
| 238290                | Other building equipment contractors  | 6,908                          | 129,936                                      | 0.000%                       | 0                                     |  |  |  |
| 238310                | Drywall and insulation contractors  | 17,053                         | 193,199                                      | 0.000%                       | 0                                     |  |  |  |
| 238320                | Painting and wall covering contractors  | 31,296                         | 166,035                                      | 0.000%                       | 0                                     |  |  |  |
| 238330                | Flooring contractors  | 13,708                         | 61,796                                       | 0.000%                       | 0                                     |  |  |  |
| 238340                | Tile and terrazzo contractors   | 8,660                          | 44,400                                       | 0.000%                       | 0                                     |  |  |  |
| 238350                | Finish carpentry contractors  | 25,851                         | 110,773                                      | 0.000%                       | 0                                     |  |  |  |
| 238390                | Other building finishing contractors  | 6,437                          | 57,915                                       | 0.000%                       | 0                                     |  |  |  |

|        | Appendix B: Fall Protection Plans .501(b)(2), (12), (13)                     |                 |                 |                  |                |  |  |  |
|--------|--|-----------------|-----------------|------------------|----------------|--|--|--|
|        | Fall Protection Systems Criteria and Practices (29 CFR part 1926, subpart M) |                 |                 |                  |                |  |  |  |
|        |  | OMB Control No. | 1218-0197       |                  |                |  |  |  |
| 2012   |  | Number          | Average number  |                  | Total Affected |  |  |  |
| NAICS  |  | of              | of construction | % Establishments | (Number times  |  |  |  |
| code   | Meaning of 2012 NAICS code   | establishments  | workers         | Affected         | %)             |  |  |  |
| 238910 | Site preparation contractors   | 33,867          | 285,513         | 0.000%           | 0              |  |  |  |
| 238990 | All other specialty trade contractors  | 29,788          | 196,728         | 0.000%           | 0              |  |  |  |
|        |  |                 |                 |                  | 760            |  |  |  |

|                       | Appendix C: Cer   | rtification of Fall 1          | Protection Training                          | .503(b)                      |  |  |  |  |
|-----------------------|---|--------------------------------|--|------------------------------|--|--|--|--|
|                       | Fall Protection Systems Criteria and Practices (29 CFR part 1926, Subpart M)<br>OMB Control No. 1218-0197 |                                |  |                              |  |  |  |  |
| 2012<br>NAICS<br>code | Meaning of 2012 NAICS code  | Number<br>of<br>establishments | Average number<br>of construction<br>workers | % Establishments<br>Affected | Total<br>Affected<br>(Number<br>times %) |  |  |  |
| 236115                | New single-family general contractors   | 48,145                         | 158,732                                      | 100.000%                     | 48,145                                   |  |  |  |
| 236116                | New multifamily housing<br>construction (except operative<br>builders)                                    | 2,707                          | 27,000                                       | 100.000%                     | 2,707                                    |  |  |  |
| 236117                | New housing operative builders  | 13,686                         | 88,721                                       | 100.000%                     | 13,686                                   |  |  |  |
| 236118                | Residential remodelers  | 90,959                         | 283,512                                      | 100.000%                     | 90,959                                   |  |  |  |
| 236210                | Industrial building construction  | 3,180                          | 77,623                                       | 100.000%                     | 3,180                                    |  |  |  |
| 236220                | Commercial and institutional building construction  | 37,882                         | 484,647                                      | 100.000%                     | 37,882                                   |  |  |  |
| 237110                | Water and sewer line and related structures construction  | 11,159                         | 148,640                                      | 15.000%                      | 1,674                                    |  |  |  |
| 237120                | Oil and gas pipeline and related structures construction  | 2,093                          | 163,057                                      | 15.000%                      | 314                                      |  |  |  |
| 237130                | Power and communication line<br>and related structures<br>construction                                    | 5,903                          | 206,596                                      | 0.000%                       | 0  |  |  |  |

|                       | Appendix C: Certification of Fall Protection Training .503(b)   |                                |  |                              |  |  |  |  |
|-----------------------|---|--------------------------------|--|------------------------------|--|--|--|--|
|                       | Fall Protection Systems Criteria and Practices (29 CFR part 1926, Subpart M)<br>OMB Control No. 1218-0197 |                                |  |                              |  |  |  |  |
| 2012<br>NAICS<br>code | Meaning of 2012 NAICS code  | Number<br>of<br>establishments | Average number<br>of construction<br>workers | % Establishments<br>Affected | Total<br>Affected<br>(Number<br>times %) |  |  |  |
| 237210                | Land subdivision  | 5,551                          | 23,387                                       | 0.000%                       | 0  |  |  |  |
| 237310                | Highway, street, and bridge construction  | 10,121                         | 250,457                                      | 25.000%                      | 2,530                                    |  |  |  |
| 237990                | Other heavy and civil engineering construction  | 4,238                          | 84,853                                       | 25.000%                      | 1,060                                    |  |  |  |
| 238110                | Poured concrete foundation and structure contractors  | 18,745                         | 173,843                                      | 50.000%                      | 9,373                                    |  |  |  |
| 238120                | Structural steel and precast concrete contractors   | 3,282                          | 59,715                                       | 25.000%                      | 821                                      |  |  |  |
| 238130                | Framing contractors   | 10,135                         | 61,852                                       | 75.000%                      | 7,601                                    |  |  |  |
| 238140                | Masonry contractors   | 17,928                         | 119,042                                      | 25.000%                      | 4,482                                    |  |  |  |
| 238150                | Glass and glazing contractors   | 5,409                          | 45,532                                       | 75.000%                      | 4,057                                    |  |  |  |
| 238160                | Roofing contractors   | 17,355                         | 145,487                                      | 100.000%                     | 17,355                                   |  |  |  |

|                       | Appendix C: Certification of Fall Protection Training .503(b)   |                                |  |                              |  |  |  |  |
|-----------------------|---|--------------------------------|--|------------------------------|--|--|--|--|
|                       | Fall Protection Systems Criteria and Practices (29 CFR part 1926, Subpart M)<br>OMB Control No. 1218-0197 |                                |  |                              |  |  |  |  |
| 2012<br>NAICS<br>code | Meaning of 2012 NAICS code  | Number<br>of<br>establishments | Average number<br>of construction<br>workers | % Establishments<br>Affected | Total<br>Affected<br>(Number<br>times %) |  |  |  |
| 238170                | Siding contractors  | 7,277                          | 28,477                                       | 50.000%                      | 3,639                                    |  |  |  |
| 238190                | Other foundation, structure, and building exterior contractors  | 5,181                          | 42,471                                       | 50.000%                      | 2,591                                    |  |  |  |
| 238210                | Electrical contractors and other wiring installation contractors  | 70,471                         | 709,731                                      | 50.000%                      | 35,236                                   |  |  |  |
| 238220                | Plumbing, heating, and air-<br>conditioning contractors   | 93,508                         | 840,511                                      | 50.000%                      | 46,754                                   |  |  |  |
| 238290                | Other building equipment contractors  | 6,908                          | 129,936                                      | 50.000%                      | 3,454                                    |  |  |  |
| 238310                | Drywall and insulation contractors  | 17,053                         | 193,199                                      | 25.000%                      | 4,263                                    |  |  |  |
| 238320                | Painting and wall covering contractors  | 31,296                         | 166,035                                      | 25.000%                      | 7,824                                    |  |  |  |
| 238330                | Flooring contractors  | 13,708                         | 61,796                                       | 0.000%                       | 0  |  |  |  |
| 238340                | Tile and terrazzo contractors   | 8,660                          | 44,400                                       | 0.000%                       | 0  |  |  |  |

| Appendix C: Certification of Fall Protection Training .503(b)   |                                       |                                |  |                              |  |
|---|---------------------------------------|--------------------------------|--|------------------------------|--|
| Fall Protection Systems Criteria and Practices (29 CFR part 1926, Subpart M)<br>OMB Control No. 1218-0197 |                                       |                                |  |                              |  |
| 2012<br>NAICS<br>code   | Meaning of 2012 NAICS code            | Number<br>of<br>establishments | Average number<br>of construction<br>workers | % Establishments<br>Affected | Total<br>Affected<br>(Number<br>times %) |
| 238350  | Finish carpentry contractors          | 25,851                         | 110,773                                      | 0.000%                       | 0  |
| 238390  | Other building finishing contractors  | 6,437                          | 57,915                                       | 25.000%                      | 1,609                                    |
| 238910  | Site preparation contractors          | 33,867                         | 285,513                                      | 0.000%                       | 0  |
| 238990  | All other specialty trade contractors | 29,788                         | 196,728                                      | 10.000%                      | 2,979                                    |
|   |                                       |                                |  |                              | 354,172                                  |