SUPPORTING STATEMENT FOR THE INFORMATION COLLECTION REQUIREMENTS OF 29 CFR PART 1926, SUBPART R ("STEEL ERECTION")¹ OFFICE OF MANAGEMENT AND BUDGET (OMB) CONTROL NO. 1218-0241(May 2008))

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 purpose of the Occupational Safety and Health Act ("OSH Act" or "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). 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. 651).

The Act specifically authorizes the Occupational Safety and Health Administration ("OSHA" or "Agency") to issue standards that "prescribe the use of labels or other appropriate forms of warning as are necessary to insure that employees are apprized of all hazards to which they are exposed, relevant symptoms and appropriate emergency treatment, and proper conditions and precautions of safe use or exposure" (29 U.S.C. 655). In addition, the OSH Act mandates 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 Agency published 29 CFR part 1926, Subpart R (the "Subpart"). The Subpart contains information collection requirements that: Notify designated parties, especially steel erectors, that building materials, components, steel structures, and fall-protection equipment are safe for specific uses; and ensure that employees exposed to fall hazards receive specified training in the recognition and control of fall hazards. Items 2 and 12 below describe the specific information collection requirements of these paragraphs.

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.

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

The Subpart contains a number of paperwork requirements. Each of the following paragraphs describes a requirement, specifies who uses it, and what purpose it serves.

§ 1926.752(a)(1). Description of the requirement. Based on the results of a specified method for testing field-cured samples, the controlling contractor must provide the steel erector with written notification that the concrete in the footings, piers, and walls, or the mortar in the masonry piers and walls, is at 75% of its minimum compressive-design strength or has sufficient strength to support loads imposed during steel erection. Note: This is not and will not be enforced for mortar in piers and walls until such time as OSHA is able to define an appropriate substitute or until an appropriate ASTM test method is developed.

<u>Use and purpose</u>. Ensures that the steel erector receives valid notification directly from the controlling contractor, before it authorizes commencement of steel erection, that the concrete or mortar will provide adequate support for the structural steel, thereby preventing collapse of the structural steel caused by erecting it on improperly cured concrete or mortar foundations.

§§ 1926.752(a)(2) and 1926.755(b)(1). Description of the requirements. Under § 1926.752(a)(2), the controlling contractor, before it authorizes commencement of steel erection, must notify the steel erector in writing that any repairs, replacements, and modifications to anchor bolts (rods) have been made in accordance with § 1926.755(b)(1) which requires the controlling contractor to obtain approval from the project structural engineer of record for the repairs, replacements, and modifications.

<u>Use and purpose</u>. Ensures that the steel erector receives valid notification directly from the controlling contractor, before it authorizes commencement of steel erection, that the anchor bolts (rods) will provide adequate support for the structural steel; defective bolts, like weak concrete or mortar, can cause steel columns to collapse.

§ 1926.753(c)(5). <u>Description of the requirement</u>. Employers must not deactivate safety latches on hooks or make them inoperable except for the situation when: A qualified rigger determines that it is safer to hoist and place purlins and single joists by doing so; or except when equivalent protection is provided in the site-specific erection plan.

<u>Use and purpose</u>. Describing equivalent protection in the site-specific erection plan is an efficient means for employers to communicate to employees and others that the employers are deactivating safety latches, and to specify the alternate protection they are providing.

§ 1926.753(e)(2). Description of the requirement. Employers must have the maximum capacity of the total multiple-lift rigging assembly, as well as each of its individual attachment points, certified by the manufacturer or a qualified rigger.

<u>Use and purpose</u>. Effectively notifies steel erectors and others (crane operators) that the entire assembly and every attachment point on this complex piece of equipment meets the specified

capacity requirements, thereby preventing improperly designed or assembled equipment from entering service and failing while lifting multiple steel members.

§§ 1926.755(b)(2) and 1926.755(b)(1). Description of the requirements. Under § 1926.755(b)(2), throughout steel erection the controlling contractor must notify the steel erector in writing of additional repairs, replacements, and modifications of anchor bolts (rods); § 1926.755(b)(1) requires that these repairs, replacements and modifications not be made without approval from the project structural engineer of record.

Use and purpose. Ensures that the steel erector receives valid notification directly from the controlling contractor as additional columns are erected that the anchor bolts (rods) will provide adequate support for the structural steel; defective bolts (rods), like weak concrete or mortar, can cause steel columns to collapse.

§ 1926.757(a)(4). <u>Description of the requirement</u>. If steel joists at or near columns span more than 60 feet, employers must set the joists in tandem with all bridging installed. However, the employer may use an alternative method of erection if a qualified person develops the alternative method, it provides equivalent stability, and the employer includes the method in the site-specific erection plan.

<u>Use and purpose</u>. Including the alternative method in the site-specific plan provides an efficient means of informing steel erectors and employees of the alternative erection method, thereby ensuring that they install the joists safely so as to prevent them from collapsing.

§ 1926.757(a)(7). Description of the requirement. Employers must not modify steel joists or steel joist girders in a way that affects their strength without the approval of the project structural engineer of record.

<u>Use and purpose</u>. Obtaining the engineer's approval to modify the strength of a steel joist or steel joist girder provides effective notification to steel erectors and their employees that these structural components have been altered and their strengths changed; misunderstood joist and joist girder strengths could lead to overloading and cause structural collapse.

§§ 1926.757(a)(9) and 1926.758(g). Description of the requirements. An employer can use a steel joist, steel joist girder, purlin, or girt as an anchorage point for a fall-arrest system only with the written approval of a qualified person.

<u>Use and purpose</u>. Having a qualified person provide the written information is an effective means of notifying steel erectors and their employees that certain structural components can sustain the additional stresses imposed by a fall-arrest system; this requirement ensures the integrity of the fall-arrest system used by steel erectors and of the structure itself.

§ 1926.757(e)(4)(i). Description of the requirement. An employer must install and anchor all bridging on joists and attach all joist bearing ends before placing a bundle of decking on the joists, unless: A qualified person determines that the structure or portion of the structure is capable of supporting the bundle, the employer documents this determination in the site-specific erection plan and follows the additional requirements specified in § 1926.757(e)(4)(ii)–(vi).

<u>Use and purpose</u>. Entering the qualified person's determination in the site-specific erection plan is the most direct and effective means for the erector to clearly communicate that it has chosen an alternative method of placing decking bundles on joists and is following the required safeguards for this optional method to ensure adequate structural support.

§ 1926.760(e) and (e)(1). <u>Description of the requirement</u>. The steel erector can leave its fall protection at the jobsite after completion of the erection activity only if the controlling contractor or its authorized representative directs the steel erector to do so and inspects and accepts responsibility for the fall protection.

<u>Use and purpose</u>. Provides a method producing continuity of fall protection on steel erection jobs after the steel erector leaves the project by transferring to the controlling contractor the responsibility for properly maintaining the fall-protection systems.

§ 1926.761. Description of the requirement. Employers must have qualified persons provide training to all employees exposed to fall hazards. This training is to include: Recognition of fall hazards at the worksite; use and operation of guardrail systems, personal fall-arrest systems, positioning-device systems, fall-restraint systems, safety-net systems, and other fall protection implemented at the worksite; correct procedures for erecting, maintaining, disassembling, and inspecting these fall-protection systems; procedures that prevent falls to lower levels, and through or into holes and openings in walking-working surfaces; and the fall-protection requirements of this Subpart. In addition, employers are to provide special training to employees engaged in multiple-lift rigging procedures (i.e., to recognize multi-lift hazards and in the proper procedures and equipment to perform multiple lifts), connector procedures (i.e., to identify connector hazards and in the requirements of §§ 1926.756(c) and 1926.760(b)), and controlled-decking-zone (CDZ) procedures (i.e., knowledge of CDZ hazards and in the requirements of §§ 1926.754(e) and 1926.760(c)).

<u>Use and purpose</u>. Training employees to recognize fall hazards at the worksite, engage in safe work practices, and use fall-protection equipment effectively enables them to avoid or control these hazards, which prevents serious injuries and death associated with this highly-hazardous industry.

Paragraph (c)(4)(ii) of Appendix G to Subpart R. Description of the requirement. This mandatory appendix duplicates the regulatory requirements of § 1926.502 ("Fall protection systems criteria and practices"), notably the requirements specified in paragraph (c)(4)(ii). This paragraph addresses the certification of safety nets as an option available to employers who can demonstrate that performing a drop test on safety nets is unreasonable. This provision allows

such employers to certify that their safety nets, including the installation of the nets, protect employees at least as well as safety nets that meet the drop-test criteria. The employer must complete the certification process prior to using the 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 the certifying party determined that the net and its installation would meet the drop-test criteria; and the signature of the party making this determination. The most recent certificate must be available at the jobsite for inspection.

<u>Use and purpose</u>. Certification is an efficient means for employees and OSHA compliance officers to verify that a safety net and its installation will protect employees at least as well as safety nets tested using the drop test, thereby ensuring that the net operates properly and safety if an employee falls into it during steel erection.

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 any available technology to meet the paperwork requirements specified by the Subpart. The Agency wrote these provisions in performance-oriented language, i.e., in terms of what information to provide, not how to provide it.

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 2 above.

The information collection requirements in the Subpart are specific to each employer involved, and no other sources or agencies duplicate these requirements or can make the required information available to OSHA, i.e., the required information is available only from the parties designated in the Subpart.

5. If the collection of information impacts small businesses or other small entities (Item 5 of OMB Form 83-I), describe any methods used to minimize burden.

The information collection requirements specified by the Subpart do not have a significant impact on a substantial number of small entities.

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

The Agency believes that the information collection frequencies required by the Subpart are the minimum frequencies 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 OSH Act at 29 U.S.C. 651. Accordingly, if employers do not

perform the required information collections required, or delay in providing this information, employees are at risk of serious injuries or death while working on steel-erection projects.

- 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 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 specified by this item; the paperwork requirements in the Subpart conform to the guidelines set forth in 5 CFR 1320.5.

8. If applicable, provide a copy and identify the date and page number of publication in the Federal Register of the agency's notice, required by 5 CFR 1320.8(d), soliciting comments on the information collection prior to submission to OMB. Summarize public comments received in response to that notice and describe actions taken by the agency in response to these comments. Specifically address comments received on cost and hour burden.

Describe efforts to consult with persons outside the agency to obtain their views on the availability of data, frequency of collection, the clarity of instructions and recordkeeping, disclosure, or reporting format (if any), and on the data elements to be recorded, disclosed, or reported.

Consultation with representatives of those from whom information is to be obtained or those who must compile records should occur at least once every 3 years, even if the collection of information activity is the same as in prior periods. There may be circumstances that may preclude consultation in a specific situation. These circumstances should be explained.

As required by the Paperwork Reduction Act of 1995 (44 U.S.C. 3506(c)(2)(A)), OSHA published a notice in the **Federal Register** on February 14, 2008, (73 FR 8712), Docket No. OSHA-2008-0007 requesting public comment on its proposed extension of the information collection requirements specified in 29 CFR Part 1926, Subpart R ("Steel Erection"). This notice is part of a preclearance consultation program intended to provide those interested parties the opportunity to comment on OSHA's request for an extension by the Office of Management and Budget (OMB) of a previous approval of the information collection requirements found in the above Subpart.

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 by the Subpart 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 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 by the Subpart do not involve 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 and aggregate the hour burdens in Item 13 of OMB Form 83-I.
 - · Provide estimates of annualized cost to respondents for the hour burdens for collections of information, identifying and using appropriate wage-rate categories.

The table below provides a summary of the annual burden hour and cost estimates for each paragraph of the Subpart that contains a paperwork requirement (and described under Item 2 above). Table 1 below provides the values used by the Agency to calculate estimates, including the number of projects covered by the paperwork requirement, the frequency with which the requirement occurs per project, the time required to perform each occurrence, the labor category

involved in performing the requirement, and the hourly wage rate for the labor category. OSHA estimates 20,787 worksites are covered by the Standard. Source: May 2006 National Occupational Employment and Wage Estimates Employer Costs, 2007, U.S. Department of Labor, Bureau of Labor Statistics, Occupational Employment Statistics. Wage rates include fringe benefits of 29 percent.

Table 1 Summary of Annual Burden Hour and Cost Estimates

Paperwork Requirement	Time to Perform (Hours)	No. of Projects Covered	Frequency per Project	Hours per Requirement ¹	Labor Category	Hourly Wage Rate	Cost per Requirement ²
§ 1926.752(a)(1) ³	0.083333	17,669	2	2,945	Field Engineer	\$39.52	\$116,386
§ 1926.752(a)(2)	0.083333	6,860	1	572	Project Manager	\$45.36	\$25,946
§ 1926.755(b)(1) ⁴	3.00000	3,534	1	10,602	Structural Engineer	\$39.52	\$418,991
§ 1926.753(c)(5)	0.083333	3118	2	520	Project Manager	\$45.36	\$23,587
§ 1926.753(e)(2)	0.083333	3118	2 ⁵	520	Qualified Rigger	\$23.74	\$12,345
§ 1926.754(c)(3)	0	0	1	0_{e}	Project Manager	0	0^6
§ 1926.755(b)(1)	0.083333	3118	1	260	Project Manager	\$45.36	\$11,794
§ 1926.755(b)(2)	3	3118	1	9,354	Structural Engineer	\$39.52	\$369,670
§ 1926.757(a)(4)	0.083333	856	1	71	Project Manager	\$45.36	\$3,221
§ 1926.757(a)(7)	5.0	856	1	4,280	Structural Engineer	\$39.52	\$169,146
§ 1926.757(a)(9) and § 1926.758(g)	0.500000	1,713	1	857	Field Engineer	\$39.52	\$33,869
§1926.757(e)(4)(i)	0.083333	343	1	29	Project Manager	\$45.36	\$1,315

Paperwork Requirement	Time to Perform (Hours)	No. of Projects Covered	Frequency per Project	Hours per Requirement ¹	Labor Category	Hourly Wage Rate	Cost per Requirement ²
\$ 1926.760(e) and \$ 1926.760(e)(1) ⁷	0.016666	19,748	1	329	Project Manager	\$45.36	\$14,923
§ 1926.761 ⁸	_	0	0	0	_	0	0
Paragraph (c)(4)(ii) of Appendix G to Subpart R ⁹	_	0	0	0	_	0	0
Totals	_			30,339	_		\$1,201,193

¹Determined by multiplying the value in "Time to Perform (Hours)" by the value in "No. of Projects Covered," and multiplying the resulting sum by the value in "Frequency per Project."

⁴In the previous ICR, OSHA estimated that controlling contractors repaired, replaced, or modified anchor bolts in about 33% of all projects. The time required for controlling contractors to notify erectors in writing of the engineer's approval was five minutes (.083333 hour), with the engineer's time being negligible for about half of these projects (which, in large part, involved replacing or repairing existing bolts). However, 17% of all projects involved extensive engineering review and examination of modified bolts, taking up to three hours to complete; for this determination, the Agency used a structural engineer instead of a project manager (as in the previous ICR).

⁷OSHA did not include this paperwork provision in its previous ICR for this Subpart. In recent telephone interviews with Agency staff, three steel erectors estimated, independently, that 95%, 100%, and 90-95% of controlling contractors direct steel erectors to leave fall protection at the jobsite after completion of the erection activity; therefore, the Agency used a figure of 95% to determine "No. of Projects Covered." OSHA assigned a value of one minute to "Time to Perform (Hours)" because project managers (i.e., the controlling contractor's authorized representative) can state this simple direction to steel erectors orally; for "Frequency per Project," the Agency used a value of one because project managers must provide the information only when steel erectors finish their steel-erection activities.

²Determined by multiplying the value in "Hours per Requirement" by the value in "Hourly Wage Rate."

³The requirement in this section generates a notification to the steel erector before the controlling contractor authorizes commencement of steel erection. The requirement in § 1926.752(b) assures that the steel erector receives the notification before it starts steel erection.

⁵In the previous ICR, OSHA estimated that each project uses two multiple lift rigging assemblies.

⁶The Agency found that this provision imposes no burden on employers because steel fabricators (i.e., manufacturers) supply the required documentation or certification to steel erectors.

⁸The language of § 1926.261 clearly specifies the training requirements in performance-oriented language; therefore, the Agency will incur no burden hours or cost for these requirements in this ICR.

⁹The Agency accounts for the burden hours and cost resulting from this provision under its ICR entitled "Construction Standards on Fall Protection Systems Criteria and Practice (§ 1926.502) and Training Requirements (§

- 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.

Item 12 above provides the total cost of the information collection requirements specified by the Subpart.

14. Provide estimates of 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 in a single table.

The Agency estimates that a compliance officer (GS-12, step 5), at an hourly wage rate of \$37.89, spends about five minutes (.08 hour) during an inspection reviewing the paperwork requirements of the Subpart. OSHA determines that its compliance officers will conduct five such inspections during each year covered by this ICR.² The Agency considers other expenses, such as equipment, overhead, and support staff salaries, as normal operating expenses that would occur without the collection-of-information requirements specified by the Subpart. Therefore, the total cost of these paperwork requirements to the Federal government is:

 $^{^{2}}$ The Agency estimated the number of inspections by determining the inspection rate (1.4%) for all facilities under the jurisdiction of the OSH Act (including both Federal OSHA and approved state-plan agencies), and then multiplied the total number of steel erection projects under construction each year (i.e., 20,787) by this percentage (i.e., 20,787 projects x 1.4% = 291 inspections).

Cost: 291 inspections x .08 hour x \$37.89 = \$882

15. Explain the reasons for any program changes or adjustments reporting in Items 13 or 14 of the OMB Form 83-I.

The Agency is not requesting any program changes or adjustments to this ICR and is requesting to retain its current burden hour estimate of 30,339 hours.

16. For collections of information whose results will be published, outline plans for tabulation, and publication. Address any complex analytical techniques that will be used. Provide the time schedule for the entire project, including beginning and ending dates of the collection information, completion of report, publication dates, and other actions.

OSHA will not publish the information collected under the Subpart.

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

No forms are available for the Agency to display the expiration date.

18. Explain each exception to the certification statement identified in Item 19 per "Certification for Paperwork Reduction Act Submission," of OMB Form 83-I.

OSHA is not requesting an exception to the certification statement in Item 19.