

**SUPPORTING STATEMENT FOR THE  
INFORMATION COLLECTION REQUIREMENTS OF THE  
OVERHEAD AND GANTRY CRANES STANDARD (29 CFR 1910.179)<sup>1</sup>  
OFFICE OF MANAGEMENT AND BUDGET (OMB)  
CONTROL NO. 1218-0224 (December 2010)**

**A. JUSTIFICATION**

**1. Explain the circumstances that make the collection of information necessary. Identify any legal or administrative requirements that necessitate the collection. Attach a copy of the appropriate section of each statute and regulation mandating or authorizing the collection of information.**

The main objective of the Occupational Safety and Health Act of 1970 (i.e., “the Act”) is to “assure so far as possible every working man and woman in the Nation safe and healthful working conditions and to preserve our human resources” (29 U.S.C. 651). To achieve this objective, the Act authorizes “the development and promulgation of occupational safety and health standards” (29 U.S.C. 651).

Section 6(b)(7) of the Act specifies that “any standard promulgated under this subsection shall prescribe the use of labels or other appropriate forms of warning as are necessary to insure that workers are apprised of all hazards to which they are exposed, relevant symptoms and appropriate emergency treatment, and proper conditions and precautions of safe use or exposure.” This provision goes on to state that “[t]he Secretary, in consultation with the Secretary of Health and Human Services, may by rule promulgated pursuant to section 553 of title 5, United States Code, make appropriate modifications in the foregoing requirements relating to the use of labels or other forms of warning . . . as may be warranted by experience, information, or medical or technological developments acquired subsequent to the promulgation of the relevant standard” (29 U.S.C. 655).

With regard to recordkeeping, the Act specifies that “[e]ach employer shall make, keep and preserve, and make available to the Secretary . . . such records . . . as the Secretary . . . may prescribe by regulation as necessary or appropriate for the enforcement of this Act . . .” (29 U.S.C. 657). The Act states further that “[t]he Secretary . . . shall prescribe such rules and regulations as [he/she] may deem necessary to carry out [his/her] responsibilities under this Act, including rules and regulations dealing with the inspection of an employer’s establishment” (29 U.S.C. 657).

Under the authority granted by the Act, the Occupational Safety and Health Administration (i.e., “OSHA” or “the Agency”) published at 29 CFR 1910.179 a safety standard for general industry regulating the operation of overhead and gantry cranes (i.e., “the Standard”). The paperwork provisions of the Standard specify requirements for: Marking the rated load of cranes; preparing

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<sup>1</sup>The purpose of this Supporting Statement is to analyze and describe the burden hours and cost 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.

certification records to verify the inspection of the crane hooks, hoist chains, and rope; preparing reports of rated load test for repaired hooks or modified cranes. Records and reports must be maintained and disclosed upon request. Items 2 and 12 below describe in detail the specific information collection requirements of the Standard.

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

The Standard specifies several paperwork requirements. The following sections describe who uses the information collected under each requirement, as well as how they use it. The purpose of these requirements is to prevent death and serious injuries among workers by ensuring that all critical components of the crane are inspected and tested on a periodic basis and that the crane is not used to lift loads beyond its rated capacity.

**(A) Marking the Rated Load (§§ 1910.179 (b)(3), (b)(5), and (k)(2))**

Paragraph (b)(5) requires that the rated load be plainly marked on the side of each crane. If the crane has more than one hoist, the rated load must be marked on each hoist or the load block. The manufacturer will mark the rated loads. If the crane is modified, paragraph (b)(3) requires the new rating to be determined and marked on the crane. Also, paragraph (k)(2) requires employers to retain rated test load results and that the results are readily available to appointed personnel. Marking the rated load capacity of a crane ensures that employers and workers will not exceed the limits of the crane, which can result in crane failure.

**(B) Inspection of and Certification Records for Hooks and Hoist Chains (§§ 1910.179 (j)(2)(iii), (j)(2)(iv), and (j)(4))**

Paragraphs (j)(2)(iii) and (j)(2)(iv) require monthly inspections with certification records of hooks and hoist chains. The certification must include the date of the inspection, the signature of the person who performed the inspection, and the serial number, or other identifier, of the inspected hook or hoist chain. Paragraph (j)(4) requires cranes that are not in regular use meet the requirements of paragraph (j)(2). Paragraph (j)(4)(iii) specifically requires that standby cranes be inspected semi-annually in accordance with paragraph (j)(2). Certification records provide employers, workers, and OSHA compliance officers with assurance that the hooks and hoist chains used on cranes regulated by the Standard have been inspected as required by the Standard. These inspections help assure that the equipment is in good operating condition, thereby preventing failure of the hooks or hoist chains during material handling. These records also provide the most efficient means for the compliance officers to determine that an employer is complying with the Standard.

**(C) Repair and Testing of Defective Hooks (§§ 1910.179(l)(3) and (k)(2))**

As required by paragraph (k)(2), employers must make readily available test reports of load rating tests of repaired crane hooks conducted under paragraph (l)(3)(iii)(a). These reports inform the employer, workers, and OSHA compliance officers that a rated load test was performed, providing information about the capacity of the crane and the adequacy of the

repaired hook. This information is used by crane operators so that they will not exceed the rated load of the crane or hook.

**(D) Inspection of and Certification Records for Ropes (§§ 1910.179 (m)(1) and (m)(2))**

Paragraph (m)(1) requires employers to inspect thoroughly all running rope in use, and do so at least once a month. In addition, rope which has been idle for at least a month must be inspected before use, and a record prepared to certify that the inspection was done. The certification record must include the inspection date, the signature of the person conducting the inspection, and the identifier of the rope inspected. Employers must keep the certification records on file and available for inspection. The certification records provide employers, workers, and OSHA compliance officers with assurance that the ropes are in good condition.

In addition, paragraph (m)(2) requires that the employer thoroughly inspect all rope which has been idle for period of a month or more. This inspection shall be for all types of deterioration and shall be performed by an appointed person whose approval shall be required for further use of the rope. A certification record shall be prepared and include the date of inspection; the signature of the person who performed the inspection; and, an identifier for the rope which was inspected.

**(E) Disclosure of Inspection Certification Records**

The disclosure of certification records provide the most efficient means for OSHA compliance officers to determine that an employer is complying with the Standard.

**3. Describe whether, and to what extent, the collection of information involves the use of automated, electronic, mechanical, or other technological collection techniques or other forms of information technology, e.g., permitting electronic submission of responses, and the basis for the decision for adopting this means of collection. Also describe any consideration of using information technology to reduce burden.**

Employers may use automated, electronic, mechanical, or other technological information-collection techniques, or other forms of information technology (e.g., electronic submission of responses) when establishing and maintaining the required records. The Agency wrote the paperwork requirements of the Standard in performance-oriented language (i.e., in terms of what data to collect, not how to record the data).

**4. Describe efforts to identify duplication. Show specifically why any similar information already available cannot be used or modified for use for the purpose(s) described in 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 the methods used to reduce the burden.**

The information collection requirements specified by the Standard 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 or is not conducted less frequently and any technical or legal obstacles to reducing the burden.**

The Agency believes that the information collection frequencies required by the Standard are the minimum frequencies necessary to effectively regulate overhead and gantry cranes, and thereby fulfill its mandate “to assure so far as possible every working man and woman in the nation safe and healthful working conditions and to preserve our human resources” as specified in the Act at 29 U.S.C. 651. Accordingly, if employers do not perform the required information collections, or delay in providing this information, workers may not have the information they need about the lifting limits of the crane or the condition of critical components, thus potentially increasing the risk of death and serious injury to workers.

**7. Explain any special circumstances that would cause an information collection to be conducted in a manner:**

- **Requiring respondents to report information to the agency more often than quarterly;**
- **Requiring respondents to prepare a written response to a collection of information in fewer than 30 days after receipt of it;**
- **Requiring respondents to submit more than an original and two copies of any document;**
- **Requiring respondents to retain records, other than health, medical, government contract, grant-in-aid, or tax records for more than three years;**
- **In connection with a statistical survey that is not designed to produce valid and reliable results that can be generalized to the universe of study;**
- **Requiring the use of statistical data classification that has not been reviewed and approved by OMB;**
- **That includes a pledge of confidentiality that is not supported by authority established in statute or regulation that is not supported by disclosure and data security policies that are consistent with the pledge, or which unnecessarily impedes sharing of data with other agencies for compatible confidential use; or**
- **Requiring respondents to submit proprietary trade secret, or other confidential information unless the agency can prove that it has instituted procedures to protect the information's confidentially to the extent permitted by law.**

No special circumstances exist that require employers to collect information using the procedures specified by this item. The requirements are within 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 before submission to OMB. Summarize public comments received in response to that notice and describe actions taken by the agency in response to those comments specifically address comments received on cost and hour burdens.**

**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, revealed, or reported.**

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

As required by the Paperwork Reduction Act of 1995 (44 U.S.C. 3506(c)(2)(A)), OSHA published a notice in the *Federal Register* on July 28, 2010 (75 FR 44288) requesting comments from the public and other interested parties on the information collection requirements contained in the Standard on Overhead and Gantry Cranes (29 CFR 1910.179). The notice was part of a preclearance consultation program that provided interested parties with an opportunity to comment on OSHA's request for an extension by the Office of Management and Budget of a previous approval of the information collection requirements found in the above standard. The Agency did not receive any comments in response to this notice.

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

The Agency will not provide payments or gifts to the respondents.

**10. Describe any assurance of confidentiality provided to respondents and the basis for the assurance in statute, regulation, or agency policy.**

The paperwork requirements specified by the Standard do not involve confidential information.

**11. Provide additional justification for any questions of a sensitive nature, such as sexual behavior and attitudes, religious beliefs, and other matters that are commonly considered private. This justification should include the reasons why the agency considers the questions necessary, the specific uses to be made of the information, the explanation to be given to persons from whom the information is requested, and any steps to be taken to obtain their consent.**

None of the provisions in the Standard require 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.**
- **Provide estimates of annualized cost to respondents for the hour burdens for collections of information, identifying and using appropriate wage-rate categories.**

## **Burden-Hour and Cost Determinations**

According to the Preliminary Economic Analysis for the Proposed Rule on Cranes and Derricks for Construction (73 FR 59713), there are 34,994 cranes operating in the general industry sector annually and at most, 90% (31,495) of the cranes are overhead and gantry cranes. Based on staff expertise, OSHA estimates that approximately 85% (26,771) of these cranes are in full-time service (i.e., used more than once a month) and the remaining 15% (4,724) are cranes in the category of idle or standby (i.e., not in use for more than one month or more at a time).

The Agency used wage rates of \$24.90 for a crane and tower operator and \$31.12 for a supervisory crane and tower operator in determining the cost of the paperwork requirements specified by the Standard. For the relevant occupational categories, OSHA adjusted the mean hourly earnings from the September 2009 *National Compensation Survey* by the Bureau of Labor Statistics to allow for fringe benefits, which comprise about 29.2 percent of total compensation in the private sector. With wages comprising 70.6 percent of employee compensation, the Agency multiplied wages by 1.4 (1/0.706) to derive total hourly employee compensation. Therefore, the costs of labor used in this analysis are estimates of total hourly compensation.

\$24.90 for a Crane and Tower Operator

\$31.12 for a Supervisory Crane and Tower Operator

### **(A) Marking the Rated Load (§§ 1910.179(b)(3), (b)(5), and (k)(2))**

Crane manufacturers mark the rated load on cranes as required by paragraph (b)(5) of the Standard as a usual and customary business practice. However, there are cases where an employer modifies a crane. In those situations, paragraph (b)(3) of the Standard requires that the new rating be determined and the new rated load posted. The new rated load information would be obtained and posted after engineering calculations are performed and various tests are conducted. It is estimated that the entire activity would take a crane operator about 2 hours, including obtaining the information and marking it on the crane and hoist as required by the Standard. The 2 hours also includes the time for an operator to place the test report on file where it is readily available to appointed personnel in accordance with §1910.179(k)(2). OSHA estimates that very few, if any; cranes are modified each year; no more than .1% (31).

Therefore, the total annual burden hour and cost estimates for these paperwork requirements are:

**Burden hours:** 31 cranes x 2 hours = 62

**Cost:** 62 hours x \$24.90 = \$1,544

### **(B) Inspection of and Certification Records for Hooks and Hoist Chains (§§ 1910.179 (j)(2)(iii), (j)(2)(iv), and (j)(4))**

Employers must perform monthly inspections of the hooks and hoist chains on the 26,771 overhead and gantry cranes in full-time service. Cranes that have been idle are also subject to inspection either before being put into service or at least every six months so that they are always standing by, ready for activation. For the purpose of calculating the burden associated with the

inspection records, OSHA assumes that when one crane is put into service, another becomes idle, so that at any time during the year, all 26,771 cranes are subject to either a monthly inspection; or are being inspected prior to being placed in service; or are being inspected semi-annually because they have been idle for 6 months or more. OSHA assumes that a crane operator takes approximately 30 minutes (.50 hour) to conduct the monthly inspection of the hooks, hoist chains, and ropes and to develop and maintain a certification record of the inspection. Therefore, the total annual burden hour and cost estimates for this paperwork requirement are:

**Burden hours:** 26,771 inspections x 12 (monthly) x .50 hour = 160,626  
**Cost:** 160,626 hours x \$24.90 = \$3,999,587

**(C) Repair and Testing of Defective Hooks (§ 1910.179(l)(3) and (k)(2))**

Paragraph (l)(3)(iii)(a) states that crane hooks showing defects described in paragraph (j)(2)(iii) of this section shall be discarded. Repairs by welding or reshaping are not generally recommended. If such repairs are attempted they shall only be done under competent supervision and the hook shall be tested to the load requirements of paragraph (k)(2) of this section before further use. Paragraph (k)(2) requires that a copy of the test reports from rated load test be placed on file and available to appointed personnel.

Such tests are required when repairs to hooks are made by welding or reshaping ((l)(3)(iii)(a)). OSHA believes the number of hooks being tested would be few, given that the standard discourages repairing and testing hooks and, in general, it is more cost effective to replace the hook. The Agency believes the number of hooks being tested would be fewer than the number of cranes; however, for calculating burden hours and cost the Agency, assumes no more than .1% of the hooks on the 31,495 cranes (31) would be tested.

The test would be conducted by either a crane operator or engineer. OSHA estimates it will take about 1 hour to conduct the test and prepare and maintain the report. Note that the Standard does not specify what information must be included in the report.

**Burden hours:** 31 cranes x 1 hour = 31  
**Cost:** 31 hours x \$ 24.90 = \$772

**(D) Inspection of and Certification Records for Ropes (§ 1910.179 (m))**

Paragraph (m)(1) requires employers to inspect thoroughly all running rope in use, and to do so at least once a month. In addition, rope which has been idle for at least a month must be inspected before use, as prescribed by paragraph (m)(2), and a record prepared to certify that the inspection was done. The certification records must include the inspection date, the signature of the person conducting the inspection, and the identifier of the rope inspected. Employers must keep the certification records on file and available for inspection. The certification records provide employers, workers, and OSHA compliance officers with assurance that the ropes are in good condition. OSHA assumes that a crane operator takes 30 minutes (.50 hour) to inspect the rope and to develop and maintain a certification record of each inspection. The assumptions

discussed in (B) above regarding the number of cranes in use and those idle are used here, resulting in total annual burden hour and cost estimates of:

**Burden hours:** 26,771 cranes x 12 monthly inspections x .50 hour = 160,626  
**Cost:** 160,626 hours x \$24.90 = \$3,999,587

**(E) Disclosure of Inspection Certification Records**

OSHA believes that approximately 441 cranes covered by the Standard<sup>2</sup> will be subject to an OSHA inspection and the employer will be required to disclose certification records annually (see Item 14 below). OSHA estimates that it will take a supervisory crane operator 5 minutes (.08 hour) to gather and disclose the requested information.

**Burden hours:** 441 inspections x .08 hour = 35  
**Cost:** 35 burden hours x \$31.12 = \$1,089

**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 Standard.

**14. Provide estimates of the annualized cost to the Federal Government. Also, provide a description of the method used to estimate cost, which should include quantification of hours, operational expenses (such as equipment, overhead, printing, and support staff), any other expense that would not have been incurred**

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<sup>2</sup>The Agency estimated the number of inspections by determining the inspection rate (1.4%) for all cranes under the jurisdiction of the Act (including both Federal OSHA and approved state-plan agencies), and then multiplying the total number of cranes regulated under the Standard (i.e., 31,495 by this percentage (i.e., 31,495 cranes x 1.4% = 441 cranes inspected). Note: This determination assumes one crane per employer.



**without this collection of information. Agencies also may aggregate cost estimates from Items 12, 13, and 14 into a single table.**

OSHA estimates that a compliance officer (GS-12, step 5), with an hourly wage rate of \$37.37<sup>3</sup>, spends about five minutes (.08 hour) during an inspection reviewing the documents required by the Standard. The Agency has determined that its compliance officers will inspect about 441 employers who use cranes regulated by the Standard during each year covered by this ICR (see footnote 2). OSHA considers other expenses, such as equipment, overhead, and support staff salaries, to be normal operating expenses that would occur without the paperwork requirements specified by the Standard. Therefore, the total cost of these paperwork requirements to the Federal government is:

$$\text{Cost: } 441 \text{ inspections} \times .08 \text{ hour} \times \$37.37 = \$1,318$$

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

The Agency is requesting an adjustment decrease of 38,764 hours, from 360,144 to 321,380. The decrease is a result of new information showing that there are 31,495 overhead and gantry cranes in use, down from the previously estimated 35,000. Table 1 below describes each of the requested burden 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 Standard.

**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 in ROCIS.**

OSHA is not seeking an exception to the certification statement in ROCIS.

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<sup>3</sup>SOURCE: U.S. Office of Personnel Management, *General Schedule and Locality Tables, Salary Table 2010-RUS*, [http://www.opm.gov/oca/10tables/pdf/rus\\_h.pdf](http://www.opm.gov/oca/10tables/pdf/rus_h.pdf).

## **B. COLLECTIONS OF INFORMATION EMPLOYING STATISTICAL METHODS**

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

**Table 1: Requested Burden Hours and Adjustments**

	<b>Information Collection Requirements</b>	<b>Requested Burden Hours</b>	<b>Current Burden Hours</b>	<b>Adjustment</b>	<b>Cost Under Item 12</b>	<b>Responses</b>	<b>Explanation for Adjustment</b>
(A)	Marking the Rated Load ((§§ 1910.179(b)(3), (b)(5), and (k)(2))	62	70	-8	\$1,544	31	New data showed a drop in the number of cranes as previously estimated from 35,000 to 31,495.
(B)	Inspection of and Certification Records for Hooks and Hoist Chains (§§ 1910.179 (j)(2)(iii), (j)(2)(iv), and (j)(4))	160,626	180,000	-19,374	\$3,999,587	321,252	New data showed a drop in the number of cranes as previously estimated from 35,000 to 31,495.
(C)	Repair and Testing of Defective Hooks (§ 1910.179(l)(3) and (k)(2))	31	35	-4	\$772	31	New data showed a drop in the number of cranes as previously estimated from 35,000 to 31,495.
(D)	Inspection of and Certification Records for Ropes (§ 1910.179 (m))	160,626	180,000	-19,374	\$3,999,587	321,252	New data showed a drop in the number of cranes as previously estimated from 35,000 to 31,495.
(E)	Disclosure of Inspection Certification Records	35	39	-4	\$1,089	441	A decrease in the number of cranes relates to a decrease in the number of inspections.
	<b>Totals</b>	<b>321,380</b>	<b>360,144</b>	<b>-38,764</b>	<b>\$8,002,579</b>	<b>643,007</b>	