OMB Control No. 1218-0221 Expiration Date: October 31, 2023

# SUPPORTING STATEMENT FOR THE INFORMATION COLLECTION REQUIREMENTS IN THE CRAWLER, LOCOMOTIVE, AND TRUCK CRANES STANDARD (29 CFR 1910.180)<sup>1</sup> OFFICE OF MANAGEMENT AND BUDGET (OMB) CONTROL NO. 1218-0221 (September 2023)

This is an extension request for a currently approved data collection.

#### A. JUSTIFICATION

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 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). Specifically, the Act states that "[t]he Secretary shall set the standard which most adequately assures, to the extent feasible . . . that no worker will suffer material impairment of health or functional capacity . . ." (29 U.S.C. 655).

The OSH Act specifies that "[a]ny 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. Where appropriate, such standard shall also prescribe suitable protective equipment and control or technological procedures to be used in connection with such standards . . ." (29 U.S.C. 655). The Act continues by stating, "[w]here appropriate, any such standard that shall prescribe the type and frequency of medical examinations or other tests . . . in order to most effectively determine whether the health of such workers is adversely affected by such exposure" (29 U.S.C. 655). Finally, the Act requires 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).

Pursuant to its statutory authority, OSHA promulgated a safety standard for general industry, regulating the operation of crawler, locomotive, and truck cranes (29 CFR 1910.180). The paperwork provisions of this standard specify requirements for developing, maintaining, and disclosing inspection records for cranes and ropes, as well as disclosing written reports of rated load tests. Items 2 and 12 below list and describe in detail the specific information collection requirements of the Standard.

<sup>&</sup>lt;sup>1</sup> The purpose of this supporting statement is to analyze and describe the burden hours and cost associated with provisions of the Standard that contain paperwork requirements; it does not provide information or guidance on how to comply with or how to enforce the standard.

OMB Control No. 1218-0221 Expiration Date: October 31, 2023

# 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 purpose of each of these requirements is to prevent workers from using unsafe cranes and ropes, thereby, reducing their risk of death or serious injury caused by a crane or rope failure during material handling. The following sections describe these requirements and specifies who uses the information collected under each requirement.

#### Inspection Classification, Periodic Inspections (§ 1910.180(d)(4))

Complete inspections of the crane shall be performed at intervals as generally defined in paragraph (d)(2)(ii) of this section depending upon its activity, severity of service, and environment, or as specifically indicated below. These inspections shall include the requirements of paragraph (d)(3) of this section and in addition, items as the following. Any deficiencies such as listed shall be carefully examined and determination made as to whether they constitute a safety hazard:

- (i) Deformed, cracked, or corroded members in the crane structure and boom.
- (ii) Loose bolts or rivets.
- (iii) Cracked or worn sheaves and drums.
- (iv) Worn, cracked, or distorted parts such as pins, bearings, shafts, gears, rollers[,] and locking devices.
- (v) Excessive wear on brake and clutch system parts, linings, pawls, and ratchets.
- (vi) Load, boom angle, and other indicators over their full range, for any significant inaccuracies.
- (vii) Gasoline, diesel, electric, or other power plants for improper performance or noncompliance with safety requirements.
- (viii) Excessive wear of chain-drive sprockets and excessive chain stretch.
- (ix) Travel steering, braking, and locking devices, for malfunction.
- (x) Excessively worn or damaged tires.

#### Inspection Classification, Inspection Records (§ 1910.180(d)(4))

Certification records which include the date of inspection, the signature of the person who performed the inspection[,] and the serial number, or other identifier, of the crane which was inspected shall be made monthly on critical items in use such as brakes, crane hooks, and ropes. This certification record shall be kept readily available.

<u>Purpose</u>: The certification records required under this paragraph provide employers, workers, and agency compliance officers with the assurance that critical items on cranes have been inspected, and that the equipment is in good operating condition so that the crane and rope will not fail during material handling. These records also enable OSHA to determine whether an employer complies with the standard.

OSHA has determined that information collected by the agency during an investigation is not subject to the PRA under 5 CFR 1320.4(a)(2). Therefore, no burden or costs are taken for the disclosure of records.

#### Rated Load Tests (§ 1910.180(e)(2))

§ 1910.180(e)(2)(i) – Written reports shall be available showing test procedures and confirming the adequacy of repairs or alterations.

§ 1910.180(e)(2)(ii) – Test loads shall not exceed 110 percent of the rated load at any selected working radius.

§ 1910.180(e)(2)(iii) – Where rerating is necessary:

- (a) Crawler, truck, and wheel-mounted cranes shall be tested in accordance with SAE<sup>2</sup> Recommended Practice, Crane Load Stability Test Code J765 (April 1961).
- (b) Locomotive cranes shall be tested in accordance with paragraph (c)(1)(i) and (ii) of this section.
- (c) Rerating test report shall be readily available.

<u>Purpose</u>: The requirements in this provision inform the employer, workers, and agency compliance officers of a crane's lifting limitations and provide information to crane operators to prevent them from exceeding these limits and causing crane failure.

#### Rope Inspections, Running Ropes (§ 1910.180(g)(1))

A thorough inspection of all ropes in use shall be made at least once a month and a certification record which includes the date of inspection, the signature of the person who performed the inspection[,] and an identifier or the ropes shall be prepared and kept on file where readily available. All inspections shall be performed by an appointed or authorized person. Any determination made as to whether further use of the rope would constitute a safety hazard. Some of the conditions that could result in an appreciable loss of strength are the following:

- (i) Reduction of rope diameter below nominal diameter due to loss of core support, internal or external corrosion, or wear of outside wires.
- (ii) A number of broken outside wires and the degree of distribution of concentration of such broken wires.
- (iii) Worn outside wires.
- (iv) Corroded or broken wires at end connections.
- (v) Corroded, cracked, bent, worn, or improperly applied end connections.
- (vi) Severe kinking, crushing, cutting, or unstranding.

#### Rope Inspections, Other Ropes (§ 1910.180(g)(2)(ii))

<sup>&</sup>lt;sup>2</sup> SAE International, formerly named the Society of Automotive Engineers.

OMB Control No. 1218-0221 Expiration Date: October 31, 2023

All rope which has been idle for a period of a month or more due to shutdown or storage of a crane on which it is installed shall be given a thorough inspection before it is used. This inspection shall be for all types of deterioration and shall be performed by an appointed or authorized person whose approval shall be required for further use of the rope. A certification record which includes the date of inspection, the signature of the person who performed the inspection, and an identified for the rope which was inspected shall be prepared and kept readily available.

<u>Purpose</u>: The certification records required under this paragraph assure employers, workers, and the agency that the inspected ropes are in good condition. Usually, OSHA requests access to records during an inspection.

OSHA has determined that information collected by the agency during an investigation is not subject to the PRA under 5 CFR 1320.4(a)(2). Therefore, no burden or costs are taken for the disclosure of records.

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. OSHA wrote the paperwork requirements of the Standard in performance-oriented language (i.e., in terms of <a href="https://www.what.gov/wha

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 A.2 above.

The information collection requirements of the standard are specific to each employer and worker involved, and no other source or agency duplicates these requirements. The required information is available only from the employers. Currently, there is no indication that any alternate source is available.

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

The requirement burdens are an equal obligation for all affected employers. The collections of information do not have a significant economic 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.

OMB Control No. 1218-0221 Expiration Date: October 31, 2023

The reporting frequencies specified in the standard are the minimum necessary to protect the safety and health of workers and, particularly, to regulate the use crawler, locomotive, and truck cranes effectively. Accordingly, if employers do not perform the required information collections, or delay in providing this information, workers may inadvertently use unsafe cranes and ropes, thereby, increasing their risk of death or serious injury caused by crane or rope failure during material lifting.

- 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 confidentially 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 in 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

OMB Control No. 1218-0221 Expiration Date: October 31, 2023

### response to those comments specifically address comments received on cost and hour burden.

As required by the Paperwork Reduction Act of 1995 (PRA) (44 U.S.C. 3506(c)(2)(A)), OSHA published a notice in the *Federal Register* on June 9, 2023 (88 FR 37907), soliciting comments from the public and other interested parties on the information collection requirements contained in the Crawler, Locomotive, and Truck Cranes Standard (29 CFR 1910.180) (Docket No. OSHA-2010-0015). This notice is part of a preclearance consultation program that provides those interested parties with the opportunity to comment on OSHA's extension request. The agency did not receive any public comments in response to this notice.

9. Explain any decision to provide any payments or gift to respondents, other than remuneration 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.

This regulation does not require the submission of any confidential information to the Federal Government; therefore, assurances of confidentiality are not applicable.

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 questions of a sensitive nature be asked.

- 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.

OMB Control No. 1218-0221 Expiration Date: October 31, 2023

- 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.

#### **Respondent Burden Hour and Cost Determinations**

The agency estimates that there are 33,986 cranes operating in the industry profile sector, a decrease of 1,008 from the previously approved request (34,994 cranes). This assumption was based on the Final Economic Analysis (FEA) (OSHA-2007-0066-0422) conducted for the Direct Final Rule on Cranes and Derricks in Construction (77 FR 49722) and the change in total employment of crane and tower operators across industries. This information is the most recent and best available data made available to the agency.

OSHA estimates that, at most, 10% of these cranes are crawler, locomotive, and truck cranes. Therefore, only 3,399 of these cranes are operating in general industry on an annual basis.

#### **Wage Rates**

The agency determined the wage rate from mean hourly wage earnings to represent the cost of employee time. For the relevant standard occupational classification category, OSHA used the wage rates reported in the Bureau of Labor Statistics (BLS), U.S. Department of Labor, *Occupational Employment and Wage Statistics* (OEWS), May 2022, last accessed on December 1, 2022. (OEWS data is available at <a href="https://www.bls.gov/oes/tables.htm">https://www.bls.gov/oes/tables.htm</a>. To access a wage rate, select the year, "Occupation Profiles," and the Standard Occupational Classification [SOC] code.)

To derive the loaded hourly wage presented in the table below, the agency used data from the OEWS, as described in the paragraph above. Then, the agency applied to the wage rate a fringe benefit markup from the following BLS release: *Employer Costs for Employee Compensation News Release* text, released 10:00 AM (ET), December 15, 2022 (<a href="https://www.bls.gov/news.release/archives/ecec\_12152022.htm">https://www.bls.gov/news.release/archives/ecec\_12152022.htm</a>). BLS reported that for civilian workers, fringe benefits accounted for 31.0% of total compensation and wages accounted for the remaining 69.0%. To calculate the loaded hourly wage, the agency divided the mean hourly wage rate by 1 minus the fringe benefits.

Table 1, below, is a summary of how the wage rate estimates were derived for the information collection requirements specified in the standard.

OMB Control No. 1218-0221 Expiration Date: October 31, 2023

Table 1 – Estimated Wage Rates										
Occupational	Standard	Mean Hour	Fringe	Loaded Hourly						
Title	Occupation	Wage Rate	Benefits	Wage Rate						
	Code	(A)	(B)	(C) = (A)/((1-(B))						
Crane and Tower	53-7021	\$31.36	.31	\$45.45						
Operator										

#### (A) <u>Inspection of and Certification Records of Cranes (§ 1910.180(d)(4) and (d)(6))</u>

The agency assumes that 95% (3,229) of the cranes will be fully operational and that a crane operator spends 15 minutes (15/60 hour) performing each monthly inspection and preparing and maintaining a written certificate for the inspection. Therefore, the total annual burden hour and cost estimates for these requirements are:

**Burden hours:** 3,229 cranes x 12 monthly inspections x 15/60 hour = 9,687 hours

**Cost:** 9,687 hours x \$45.45 = \$440,274.15

#### (B) Rated Load Tests (§ 1910.180(e)(2))

Written reports showing test procedures and confirming the adequacy of repairs or alterations shall be made available. Where crane rerating may be necessary, the accompanying reports shall also be made readily available.

OSHA estimates it will take about 1 hour for a crane operator to conduct the test and prepare the report. The number of cranes or hooks that may be subjected to testing is estimated at no more than 2% (68) of the total number of cranes in use. Therefore, the total annual cost and burden estimates for this requirement are:

**Burden hours:** 68 cranes x 1 hour = 68 hours **Cost:** 68 hours x \$45.45 = \$3,090.60

#### (C) <u>Inspection of and Certification Records for Ropes (§ 1910.180(g)(1) and (g)(2)(ii))</u>

Employers must inspect the ropes attached to fully operational cranes (3,229 cranes) monthly. The agency also assumes that the remaining 170 cranes will be used on a part-time basis (i.e., at least six times per year) and that employers must inspect their ropes before each use.

OSHA assumes that a crane operator takes 30 minutes (30/60 hour) to inspect a crane's ropes and to develop and maintain a written certificate for each inspection. Therefore, the total annual cost and burden estimates for these requirements are:

**Burden hours:** 3,229 full-time cranes x 12 monthly inspections x 30/60 hour

= 19,374 hours

**Cost:** 19,374 x \$45.45 = \$880,548.30

OMB Control No. 1218-0221 Expiration Date: October 31, 2023

**Burden hours:** 170 part-time cranes x 6 monthly inspections x 30/60 hour = 510 hours

**Cost:** 510 hours x \$45.45 = \$23,179.50

*Subtotal Burden hours:* 19,374 + 510 = 19,884 hours

*Subtotal Cost:* \$880,548.30 + \$23,179.50 = \$903,727.80

Table 2, below, provides the annualized burden hour and cost estimates for the information collection requirements specified by the standard.

## CRAWLER, LOCOMOTIVE, AND TRUCK CRANES STANDARD (29 CFR 1910.180) OMB Control No. 1218-0221

Expiration Date: October 31, 2023

Table 2 Estimated Annualized Respondent Hour and Cost Burden Table											
Information Collection Requirement	Type of Respondent	No. of Respondents	No. of Responses per Respondent	Total No. of Responses	Avg. Burden per Response (In Hrs.)	Total Burden Hours	Avg. Hourly Wage Rate	Total Burden Costs			
Inspection of and Certification Records of Cranes (§ 1910.180(d)(4) and (d)(6))											
Crane and Tower Operator		3,229	12	38,748	15/60	9,687	\$45.45	\$440,274.15			
Rated Load Tests (§ 1910.180(e)(2))											
Crane and Tower Operator		68	1	68	1	68	\$45.45	\$3,090.60			
Inspection of and Certification Records for Ropes (§ 1910.180(g)(1) and (g)(2)(ii))											
Crane and Tower Operator		3,229	12	38,748	30/60	19,374	\$45.45	\$880,548.30			
Crane and Tower Operator		170	6	1,020	30/60	510	\$45.45	\$23,179.50			
GRAND TOTALS		3,399*	1	78,584		29,639		\$1,347,093 (rounded)			

<sup>\*</sup> Universe of Crawlers, locomotive and truck cranes operating in general industry.

THE CRAWLER, LOCOMOTIVE, AND TRUCK CRANES STANDARD (29 CFR 1910.180) OMB Number 1218-0221 April 2020

- 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. There are no additional costs to the respondent.

14. Provide estimates of the annualized cost to the Federal Government. Also, provide a description of the method used to estimate cost, which should include quantification of hours, operational expenses (such as equipment, overhead, printing, and support staff), any other expense that would not have been incurred without this collection of information. Agencies also may aggregate cost estimates from Items 12, 13, and 14 into a single table.

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

THE CRAWLER, LOCOMOTIVE, AND TRUCK CRANES STANDARD (29 CFR 1910.180) OMB Number 1218-0221 April 2020

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

The agency is requesting an adjustment decrease to its current burden hours by 872 hours (from 30,511 to 29,639). This decrease in burden hours is due to the decrease in operational cranes used for general industry purposes by 1,008 (from 34,994 to 33,986).

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.

The information required to be collected by the standard will not produce results that will be published for statistical use.

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.

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 requirement (*See* 5 CFR 1320.3(f)(3)). OSHA believes that this is the most appropriate and accurate mechanism to inform interested parties of these expiration dates.

18. Explain each exception to the certification statement.

OSHA is not seeking an exception to the certification statement.

#### B. COLLECTION OF INFORMATION EMPLOYING STATISTICAL METHODS.

This supporting statement does not contain any collection of information requirements that employ statistical methods.