

**Department of Labor  
Occupational Safety and Health Administration  
Final Supporting Statement**

**SUPPORTING STATEMENT FOR THE  
INFORMATION COLLECTION REQUIREMENTS OF THE  
STANDARD ON GENERAL WORKING CONDITIONS  
IN SHIPYARD EMPLOYMENT  
(29 CFR PART 1915, SUBPART F)<sup>1</sup>  
OFFICE OF MANAGEMENT AND BUDGET (OMB)  
CONTROL NO. 1218-0259  
(October 2014)**

**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 purpose of the Occupational Safety and Health Act of 1970 (OSH Act) (29 U.S.C. 651 *et seq.*) 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.” To achieve this objective, the OSH Act specifically authorizes “the development and promulgation of occupational safety and health standards” (29 U.S.C. 651).

With regard to recordkeeping, 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” or “the Agency”) published the standard on General Working Conditions in Shipyards (29 CFR part 1915, Subpart F). Items 2 and 12 below describe in detail the information collection requirements contained in subpart F.

- 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.**

**§1915.83 Utilities**

Paragraph (a)(1) requires employers to obtain a written or oral determination from a responsible vessel’s representative, a contractor, or any other person who is qualified by training, knowledge, or experience to make such a determination, that the working pressure of the vessel’s steam piping system is safe.

OSHA believes that obtaining an oral or written determination of the safe working condition of

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<sup>1</sup>The purpose of this Supporting Statement is to analyze and describe the burden hours and costs associated with provisions of the subpart F 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 pressure for the vessel's steam piping system is a normal exchange of information between an engineer and a technician. Therefore, there is no burden associated with this collection of information requirement (see 5 CFR 1320.3(b)(2)).

Paragraph (c)(3) requires employers to obtain an oral or written determination from a responsible vessel's representative, a contractor, or any other person who is qualified by training, knowledge, or experience to make such determination, that each circuit to be energized is in a safe condition. OSHA believes that obtaining an oral or written determination of each circuit energized is a usual and customary practice when determining the safe condition. Therefore, there is no burden associated with this collection of information requirement (see 5 CFR 1320.3(b)(2)).

### **§1915.87 Medical Services and First Aid**

#### **First Aid Providers**

Paragraph (c)(5) requires employers to ensure that there are an adequate number of trained first aid providers at each worksite during each workshift, and that any worker designated to provide first aid maintains current first aid and CPR certifications, such as issued by the Red Cross, American Heart Association, or other equivalent organization. Workers with up-to-date first-aid knowledge ensure that injured workers receive appropriate intervention in the timeliest manner possible.

OSHA believes that the first aid training and certificate requirement is similar to performance-oriented training requirements, and, therefore, imposes no burden hours or costs. The standard is designed to give employers the maximum flexibility in meeting this requirement. The employer does not prepare the first-aid certificate, and it is a usual and customary practice for associations such as the American Red Cross, and American Heart Association, to provide certificates to those individuals that have attended and satisfactorily completed first aid training.

#### **Marking Location of Basket Stretchers**

Paragraph (f)(3) requires employers to store basket stretchers, or the equivalent, and related equipment (for example, restraints, blankets) in a clearly marked location in a manner that prevents damage, and protects the equipment from environmental conditions. Marking stretchers and their related equipment locations will make them easily located in the event of an emergency.

### **§1915.88 Sanitation**

#### **Marking Non-potable Water Supplies**

Paragraph (c)(2) requires employers to clearly mark non-potable water supplies and outlets as "not safe for health or personal use." Marking such supplies protects workers from accidentally ingest unhealthy water. OSHA provides the specific language to the employer for public disclosure; therefore, this is not a collection of information under 5 CFR 1320.3(c)(2).

#### **Informing Workers to Wash Hands and Face**

Paragraph (e)(3) requires employers to inform each worker engaged in the application of paints or coatings or in other operations where hazardous or toxic substances can be ingested or

absorbed about the need for removing surface contaminants from the surface of their skin by thoroughly washing their hands and face at the end of the workshift and prior to eating, drinking, or smoking. This requirement has been a usual and customary practice in shipyard employment since adopted by OSHA in 1972. Pursuant to section 6(a) of the OSH Act, which allowed the Agency in the first two years after enactment of the Act to adopt as OSHA standards existing Federal and national consensus standards (37 FR 22458 (10/19/1972)), OSHA adopted this provision from safety standards promulgated under the Longshore and Harbor Workers' Compensation Act (33 U.S.C. 941). Therefore, OSHA believes this is a normal activity and there are no burden hours or costs for this provision.

Informing workers to wash their hands and face helps ensure workers will not overlook taking the necessary precaution to avoid exposure to potentially hazardous substances. This can be accomplished by posting a sign in the workplace, training new workers of the requirement, or by posting the information in bathrooms as a reminder for workers to wash their hands.

### **§1915.89 Control of Hazardous Energy (Lockout/Tags-plus)**

#### **Developing a Lockout and Tags-plus Program**

Paragraph (b) requires that employers establish and implement a written program and procedures for the use of lockout and tags-plus systems to control hazardous energy during the servicing of any machinery, equipment, or system in shipyard employment. This program must include the following:

- (1) Procedures for lockout/tags-plus systems while servicing machinery, equipment, or systems in accordance with paragraph (c);
- (2) Procedures for protecting workers involved in servicing any machinery, equipment, or system in accordance with paragraphs (d) – (m);
- (3) Specification for locks and tags-plus hardware in accordance with paragraph (n);
- (4) Worker information and training in accordance with paragraph (o);
- (5) Incident investigations in accordance with paragraph (p); and
- (6) Program audits in accordance with paragraph (q).

This information is needed so that the lockout/tags-plus coordinator can effectively oversee all lockout/tags-plus applications prior to the servicing of any machinery, equipment, or system, which will ensure the safety of each authorized and affected employee.<sup>2</sup>

Paragraph(c)(3) requires the employer to ensure the use of a tags-plus system to prevent energization or startup, or the release of hazardous energy, before any servicing is started if an energy-isolating device is not capable of being locked.

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<sup>2</sup>*Affected Employee* means a worker who normally operates or uses the machinery, equipment, or system that is going to be serviced under lockout/tags-plus or who is working in the area where servicing is being performed under lockout/tags-plus.

Paragraph (c)(4)(i) requires that a tag be affixed to each energy-isolating device that is secured.

### **Lockout and Tags-plus Log**

Paragraph (c)(7)(iv) requires employers to ensure that the lockout/tags-plus coordinator maintains and administers a continuous log of each lockout and tags-plus system. The log shall contain:

- (A) Location of machinery, equipment, or system to be serviced;
- (B) Type of machinery, equipment, or system to be serviced;
- (C) Name of the authorized employee<sup>3</sup> applying the lockout/tags-plus system;
- (D) Date that the lockout/tags-plus system is applied;
- (E) Name of the authorized employee removing the lock or tags-plus system; and
- (F) Date that lockout/tags-plus system is removed.

### **Note to paragraph (c)(7)**

The note to paragraph (c)(7) gives an exemption to employers, stating that when the military ship's force serves as the lockout/tags-plus coordinator and maintains control of the lockout/tags-plus log, the employer need not comply with the requirements in paragraph (c)(7) when coordination between the ship's force and the employer occurs to ensure that applicable lockout/tags-plus procedures are followed and documented.

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*Authorized Employee* means a worker who performs one or more of the following lockout/tags-plus responsibilities: executes the lockout/tags-plus procedures; installs a lock or tags-plus system on machinery, equipment, or systems; or services any machine, equipment, or system under lockout/tags-plus application.

## **Lockout and Tags-plus Written Procedures**

Paragraph (d)(1) requires the employer to establish and implement written procedures to prevent energization or startup, or the release of hazardous energy, during the servicing of any machinery, equipment, or system. Each procedure shall include:

- (i) A clear and specific outline of the scope and purpose of the lockout/tags-plus procedure;
- (ii) The means the employer will use to enforce compliance with the lockout/tags-plus program and procedures; and
- (iii) The steps that must be followed for:
  - (A) Preparing for shutting down and isolating the machinery, equipment, or system to be serviced, in accordance with paragraph (e);
  - (B) Applying the lockout/tags-plus system, in accordance with paragraph (f);
  - (C) Verifying deenergization and isolation, in accordance with paragraph (g);
  - (D) Testing the machinery, equipment, or system, in accordance with paragraph (h);
  - (E) Removing lockout/tags-plus systems, in accordance with paragraph (i);
  - (F) Starting up the machinery, equipment, or system that is being serviced, in accordance with paragraph (j);
  - (G) Applying lockout/tags-plus systems in multiple-worker servicing operations, in accordance with paragraph (k);
  - (H) Addressing multi-employer worksites involved in servicing any machinery, equipment, or system, in accordance with paragraph (l); and
  - (I) Addressing shift or personnel changes during servicing operations, in accordance with paragraph (m).

### **Note to paragraph (d)(1)**

The note to paragraph (d)(1) specifies that the employer need only develop a single procedure for a group of similar machines, equipment, or systems if the machines, equipment, or systems have the same type and magnitude of energy and the same or similar types of controls, and if a single procedure can satisfactorily address the hazards and the steps to be taken to control these hazards.

## **Procedures for Shutdown and Isolation**

Paragraph (e)(1)(ii) requires employers to notify each affected worker that the machinery, equipment, or system will be shut down and deenergized prior to servicing, and that a lockout/tags-plus system will be implemented.

### **Note to paragraph (e)**

Note to paragraph (e) states that when the Navy ship's force shuts down any machinery, equipment, or system, and relieves, disconnects, restrains, or otherwise renders safe all potentially hazardous energy that is connected to the machinery, equipment, or system, the employer will be in compliance with the requirements in paragraph (e) when the employer's authorized employee verifies that the machinery, equipment, or system being serviced has been properly shut down, isolated, and deenergized.

## **Procedures for Removal of Lockout and Tags-plus Systems**

Paragraph (i)(1)(i) requires the authorized employee to notify all other authorized and affected workers that the lockout/tags-plus system will be removed before physically removing any lockout/tags-plus system and restoring the machinery, equipment, or system to use.

## **Procedures for Multi-employer Worksites**

Paragraph (l)(1) requires that the host employer establish and implement procedures for the lockout/tags-plus program to protect workers from hazardous energy in multi-employer worksites.

Paragraph (l)(2) requires the host employer inform each contract employer about the content of the host employer's lockout/tags-plus program and procedures; instruct each contract employer to follow the host employer's lockout/tags-plus program and procedures; and ensure that the lockout/tags-plus coordinator knows about all servicing operations and communicates this information with each contract employer who performs servicing or works in an area where servicing is being conducted.

Paragraph (l)(3) requires the contract employer, when working in a multi-employer worksite, to follow the host employer's lockout/tags-plus program and procedures, and ensure that the host employer knows about the lockout/tags-plus hazards associated with the contract employer's work, and what the contract employer is doing to address the hazards. In addition, the contract employer must inform the host employer of any previously unidentified lockout/tags-plus hazards that the contract employer identifies at the multi-employer worksite.

These provisions ensure that there is an exchange of information between the host employer and the contract employer before servicing begins. This exchange of knowledge prevents any misunderstanding regarding the implementation of lockout or tags-plus procedures, and the use of lockout or tags-plus devices for a particular application. The exchange of information between the host employer and the contract employer is usual and customary practice that is included in the lockout tags-plus procedures.

## **Lockout and Tags-plus Devices**

Paragraph (n)(3)(iv) requires that each lock and tag to indicate the identity of the authorized employee applying it. Paragraph (n)(3)(v) requires that each tag warn against hazardous conditions that could arise if the machinery, equipment or system is energized. In addition, the tag must include a legend such as one of the following: Do Not Start; Do Not Open; Do Not Close; Do Not Energize; Do Not Operate.

This provision provides safe work practice to authorized employees applying the lockout/tags-plus devices by giving the identity of the person applying it and warning against hazards that might exist.

### **Training Certification**

Paragraph (o)(7) requires the employer to prepare training records that document the completion of the worker training and designate that the training is current. The training certification shall contain at least the workers' name, date of training, and subject of training. The requirement for employers to maintain written certification of their workers' training helps employers keep track of the training the workers have.

### **Incident Investigations**

Paragraph (p)(2) requires that the employer promptly, but not later than 24 hours following the incident, initiate an incident investigation and notify each worker who was, or could have been, reasonably affected by the incident.

Paragraph (p)(4) requires the employer to prepare a written report of the incident investigation that must include: (i) the date and time of the incident; (ii) the date and time the incident investigation began; (iii) the location of the incident; (iv) a description of the incident; (v) the factors that contributed to the incident; (vi) a copy of any lockout/tags-plus log that was current at the time of the incident; and (vii) any corrective actions that need to be taken as a result of the incident. Paragraph (p)(5) requires that the employer to review the written incident report with each worker whose job tasks are relevant to the incident investigation findings, including contract workers when applicable. In accordance with paragraph (p)(6), the employer must ensure that the incident investigation and written report are completed, and all corrective actions implemented, within 30 days following the incident.

Paragraph (p)(7) requires the employer to prepare a written abatement plan if it is determined infeasible to implement all of the corrective actions within 30 days. The abatement plan must contain an explanation of the circumstances causing the delay, a proposed timetable for the abatement, and a summary of the steps the employer is taking in the interim to protect workers from hazardous energy while servicing machinery, equipment, or systems.

### **Auditing of the Energy Control Procedures**

Paragraph (q)(1) requires the employer to conduct an audit of their current lockout/tags-plus program and procedures, at least annually. This is to ensure that the procedures and requirements of the standard are being followed, and that any deficiencies are being corrected.

Paragraph (q)(3) requires the employer to ensure that the audit includes: (i) a review of the written lockout/tags-plus program and procedures; (ii) a review of the current lockout/tags-plus log; (iii) verification of the accuracy of the lockout/tags-plus log; and (iv) a review of incident reports since the last audit. OSHA believes the review of audits by employers is usual and customary and, therefore, will not impose a paperwork burden.

Paragraph (q)(4) requires the employer to prepare a written audit report that includes at least: (i) the date of the audit; (ii) the identity of the individual(s) who performed the audit; (iii) the identity of the procedure, and machinery, equipment, or system being audited; (iv) the findings of the program audit and recommended actions to correct any deviations or deficiencies identified during the audit; (v) any incident investigation reports since the previous audit; and (vi) descriptions of corrective actions the employer has taken in response to the findings and recommendations.

Conducting an audit of the energy-control procedures will ensure that the procedures in place are working properly and help to identify any deviations or inadequacies with the current procedures.

### **Recordkeeping**

Paragraph (r)(1) specifies in Table F-3 what records the employer must retain and for how long they must be retained:

**Table F-3 to Subpart F – Retention of Records Required by § 1915.89**

<b>The employer must keep the following records . . .</b>	<b>For at least . . .</b>
(i) Current lockout/tags-plus program and procedures	Until replaced by updated program and procedures
(ii) Training records	Until replaced by updated records for each type of training
(iii) Incident investigation reports	Until the next program audit is completed
(iv) Program audit report	12 months after being replaced by the next audit report

Paragraph (r)(2) directs employers to make all records required by the Standard available to workers, their representatives, and the Assistant Secretary in accordance with the procedures and time periods specified in 29 CFR 1910.1020(e)(1) and (e)(3).



### **§1915.92 Retention of DOT Markings, Placards, and Labels**

Paragraphs (a) and (b) require that employers retain labels and markings on any hazardous materials or freight containers, rail freight cars, motor vehicles, or transportation vehicles that the U.S. Department of Transportation regulations require to be marked until the hazardous materials are sufficiently removed, and free of any residue and any vapors purged to prevent potential hazards. This would apply regardless of whether the shipyard receives the hazardous materials in packages or in bulk. Employers need not affix labels to freight containers, rail freight cars, motor vehicles, or transportation vehicles that already have labels and markings that designate their containment of hazardous materials. As such, OSHA does not believe this requirement will impose paperwork burdens or costs on shipyard employers.

Paragraph (c) requires that the markings, placards, and labels on the hazardous materials be maintained so that they are "readily visible." This requirement does not impose paperwork burdens or costs on shipyard employers.

Paragraph (d) informs employers that for non-bulk packages that will not be reshipped, the requirements of this section are met if a label or other acceptable marking is affixed in accordance with 29 CFR 1910.1200, Hazard Communication. Labels serve as a means to notify employers and workers about the presence of hazardous materials in their immediate work area.

### **§1915.93 Motor Vehicle Safety Equipment, Operation, and Maintenance**

Paragraph (a)(3) of this section requires employers to comply with the maintenance, inspection, operation, and training requirements in §1910.178 for powered industrial trucks, which already applies to shipyard employment. The burden hour and costs are included in the Powered Industrial Truck information collection request (ICR) (OMB control number 1218-0242)<sup>4</sup>.

### **§1915.94 Servicing Multi-piece and Single Piece Rim Wheels**

Section 1915.94 incorporates by reference the general industry standard (§1910.177) and non-mandatory appendices on servicing multi-piece and single piece rim wheels. Paragraph (d)(3)(iv) of the general industry standard requires that when defective restraining devices and barriers are removed from service, they must not be returned to service until they are repaired and reinspected. If the repair is structural (for example, component replacement or rewelding), the manufacturer or a Registered Professional Engineer must certify that the strength requirements specified in (d)(3)(i) of the standard have been met. The burden hours and costs for shipyards complying with this requirement are already included in the Multi-Piece and Single Rim Wheel ICR (1218-0219). The burden hour and costs estimates in the Multi-Piece and Single Rim Wheel ICR are based on discussions with the Tire Industry Association and a manufacturer of restraining devices. In addition, the Tire Industry Association and manufacturer of restraining devices reported that few damaged restraining devices and/or barriers are repaired. Given this, OSHA estimated that approximately eight damaged devices and barriers are annually repaired. OSHA believes this estimate is inclusive of shipyards.

**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**

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<sup>4</sup>See Final Rule for General Working Conditions in Shipyard Employment.

**burden.**

Employers may use automated, electronic, mechanical, or other technological collection techniques, or other forms of information technology when establishing and maintaining the required records. To satisfy the goal of reduced employer burden, the Agency has written the subpart F requirements in performance-oriented language (i.e., in terms of what data to collect, not how to record the data).

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

The requirements to collect and maintain information are specific to each employer and the 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 the grant recipient).

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

The information collection requirements in subpart F 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 subpart F are the minimum frequencies necessary to effectively fulfill its mandate “to assure so far as possible every working man and women in the Nation safe and healthful working conditions and to preserve our human resources” as specified in the OSH Act (29 U.S.C. 651).

**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 confidentiality to the extent permitted by law.**

No special circumstances exist that require employers to collect information in a manner or using procedures specified by this item. The information collection requirements are consistent with the guidelines set forth in 5 CFR 1320.5

- 8. If applicable, provide a copy and identify the data 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 (PRA-95) (44 U.S.C. 3506(c)(2)(A)), OSHA published a notice in the Federal Register on August 22, 2014 (79 FR 49819) requesting public comments on its proposed extension of the information collection requirements specified by the standard on General Working Conditions in Shipyard Employment (29 CFR part 1915, subpart F). This notice was 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 standard.

On August 27, 2014, Aaron Adamczyk listed a number of national consensus standards referenced in 29 CFR 1915, Subpart P that are outdated. OSHA recognizes that those regulations do not reflect the latest editions of the NFPA standards they reference. OSHA does have the regulatory means in place to update these standards, though such action is not on the current Regulatory Agenda. However, since the outdated consensus standards do not impact the collection of information requirements contained in the standard, the Agency will retain its burden hour and cost estimates.

- 9. Explain any decision to provide any payment or gift to respondents, other than remuneration of contractors or grantees.**

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

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

No elements of confidentiality are involved.

- 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 subpart F 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 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 collection of information, identifying and using appropriate wage rate categories.**

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

The burden hours and estimated costs used in this ICR are based primarily on the Final Economic Analysis (FEA) of the Standard prepared by OSHA's Office of Regulatory Analysis. Table 9 summarizes the burden hours and costs associated with each provision in the Standard that contains a paperwork requirement.

### **Wage Rates**

The wage rates below, which include benefits, are based on those used in the FEA. OSHA inflated the wage rate from the FEA to 2011 based on the change in total annual payroll per employee.<sup>5</sup>

- o Supervisors (\$38.50 per hour for shipyards, \$48.08 per hour for water transportation, \$35.91 per hour for fish processing, \$20.35 per hour for commercial fishing)
- o Authorized Employees (\$27.69 per hour for shipyards, \$50.62 per hour for water transportation, \$34.03 per hour for fish processing, \$16.29 per hour for commercial fishing)
- o Affected Employees (\$22.78 per hour per hour for shipbuilding and repair establishments; \$33.32 for water transportation, \$19.37 per hour for fish-processing vessels, and \$16.29 per hour for commercial fishing)
- o Secretary (\$19.62 per hour)
- o Shipyard workers (\$30.95 per hour)

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<sup>5</sup>OSHA used total employment and annual payroll as reported by the 2007 and 2011 Statistics for U.S. Businesses to calculate the change in payroll per employee from 2007 to 2011.

### **§1915.87 Medical services and first aid (marking location of stretchers)**

Paragraph (f)(3) requires employers to store basket stretchers, or the equivalent, and related equipment (for example, restraints, blankets) in a clearly marked location in a manner that prevents damage and protects them from environmental conditions. OSHA believes no more than 10% of the 173<sup>6</sup> shipyards would need to annually prepare or replace stretcher location signs. The number of stretchers would be limited, and no new information would need to be developed; therefore, it is estimated that these shipyards would only expend 10 minutes (.17 hour) to repost the location signs.

**Burden hours:** 17 shipyards x .17 hour = 3 hours

**Cost:** 3 hour x \$30.95 = \$93

### **§1915.89 Control of Hazardous Energy (Lockout/Tags-plus)**

#### **Developing Lockout/Tags-plus Program**

Paragraph (b) requires that employers develop and implement written programs and procedures for the control of hazardous energy when workers are engaged in the servicing of any machinery, equipment, or system in shipyard employment. Paragraph (d)(1) requires the employer to establish and implement written procedures to prevent energization or startup, or the release of hazardous energy, during the servicing of any machinery, equipment, or system. The class size of the establishment determines how many hours a supervisor takes to develop, document, and maintain the hazardous-control procedures.

Paragraph (l)(1) requires the host employer to establish and implement lockout/tags-plus procedures to protect workers from hazardous energy in multi-employer worksites.

Paragraph (l)(3) requires the contract employer, when working in a multi-employer worksite, to follow the host employer's lockout/tags-plus program and procedures, and ensure that the host employer knows about the lockout-tags plus hazards associated with the contract employer's work, and what the contract employer is doing to address the hazards. In addition, the contract employer must inform the host employer of any previously unidentified lockout/tags-plus hazards that the contract employer identifies at the multi-employer worksite.

The Agency estimates that a supervisor takes from 2 hours to 80 hours, depending on the size of the affected establishment, to develop and implement procedures. Table 1, *Burden Hours and Costs for Energy Control Procedures*, provides the number of newly identified affected establishments in each size class and the burden hours and costs to develop control procedures for each size establishment.

**Table 1  
Burden Hours and Costs for**

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OSHA based the number of shipyards (and other establishments) on the numbers estimated in the FEA. OSHA inflated the number of establishments based on the percent change in total establishments in the relevant industries (shipyards – 336611; commercial fishing – 11411; fish processing – 311712; tug and towing services – 488330; and passenger vessels – 483114 and 483212) from the 2007 to the 2011 County Business Patterns data.

## Energy-Control Procedures

	Size Class	Newly Identified Establishments	Time in Hours	Total Hours	Supervisor's Wage Rate	Cost
Shipyards						
	500-999	4	20	80	\$38.50	\$3,080
	200-499	2	80	160	\$38.50	\$6,160
Offsite						
	1-19*	13	2	26	\$38.50	\$1,001
Commercial Fishing						
	100-199	2	40	80	\$20.35	\$1,628
	1-19	23	2	46	\$20.35	\$936
Fish Processing	1000 & Up	22	20	440	\$35.91	\$15,800
	500-999	4	20	80	\$35.91	\$2,873
Tug & Towing Services						
	100-199	3	40	120	\$48.08	\$5,770
	1-19	3	2	6	\$48.08	\$288
Passenger Vessels	20-99	1	12	12	\$48.08	\$577
	1-19	4	2	8	\$48.08	\$385
	<b>TOTAL</b>	<b>81</b>		<b>1,058</b>		<b>\$38,498</b>
<p>*These establishments, which are shipyard contractors and subcontractors, will either develop their own energy control plan or develop a joint program with the actual shipyard.            Source: Office of Regulatory Analysis, OSHA.</p>						

The Agency estimates that, on a yearly basis, a supervisor takes from 30 minutes (.50 hour) to 20 hours, depending on the size of the affected establishment, to inspect and update procedures. Table 2, *Annual Burden Hours and Costs for Energy Control Procedure Updates*, provides the number of affected establishments in each size class and the burden hours and costs for each size establishment.

**Table 2  
Annual Burden Hours and Costs for  
Energy Control Procedure Updates**

	Size Class	Affected Establishments	Time in Hours	Total Hours	Supervisor's Wage Rate	Cost
Shipyards	1000 & Up	36	20	720	\$38.50	\$27,720
	500-999	29	20	580	\$38.50	\$22,330

	Size Class	Affected Establishments	Time in Hours	Total Hours	Supervisor's Wage Rate	Cost
	200-499	34	20	680	\$38.50	\$26,180
	100-199	44	12	528	\$38.50	\$20,328
	20-99	30	4	120	\$38.50	\$4,620
Offsite	20-99*	82	4	328	\$38.50	\$12,628
	1-19*	384	0.5	192	\$38.50	\$7,392
<b>Commercial Fishing</b>						
	1000 & Up	7	20	140	\$20.35	\$2,849
	500-999	3	20	60	\$20.35	\$1,221
	200-499	1	20	20	\$20.35	\$407
	100-199	10	12	120	\$20.35	\$2,442
	20-99	21	4	84	\$20.35	\$1,709
	1-19	1,099	.05	550	\$20.35	\$11,193
<b>Fish Processing</b>						
	1000 & Up	44	20	880	\$35.91	\$31,601
	500-999	10	20	200	\$35.91	\$7,182
	200-499	8	20	160	\$35.91	\$5,746
	100-199	15	12	180	\$35.91	\$6,464
	20-99	41	4	164	\$35.91	\$5,889
	1-19	96	0.5	48	\$35.91	\$1,724
<b>Tug &amp; Towing Services</b>						
	1000 & Up	45	20	900	\$48.08	\$43,272
	500-999	14	20	280	\$48.08	\$13,462
	200-499	5	20	100	\$48.08	\$4,808
	100-199	16	12	192	\$48.08	\$9,231
	20-99	88	4	352	\$48.08	\$16,924
	1-19	471	0.5	236	\$48.08	\$11,347
<b>Passenger Vessels</b>						
	20-99	21	4	84	\$48.08	\$4,039
	1-19	105	0.5	53	\$48.08	\$2,548
	<b>TOTAL</b>	<b>2,759</b>		<b>7,951</b>		<b>\$305,256</b>

\*These establishments, which are shipyard contracts and subcontractors, will either develop their own energy control plan or develop a joint program with the actual shipyard.  
Source: Office of Regulatory Analysis, OSHA.

### Lockout/Tags-plus Log

Paragraph (c)(7)(iv) requires that the lockout/tags-plus coordinator maintain and administer a continuous lockout/tags-plus log of each lockout/tags-plus system. The log must contain the location and type of machinery, equipment, or system to be serviced, the name of the authorized employee applying the lockout/tags-plus system, the date the system is applied, the name of the authorized employee removing the lock or tags-plus system, and the date the system is removed. The Agency estimates that it takes 5 minutes (.08 hour) of the lockout/tags-plus coordinator's time (at the authorized employee's wage rate) to complete the lockout/tags-plus log per lockout/tags-plus application. The number of lockout/tags-plus activities per year is based on the estimates presented below<sup>7</sup> (See Table 3).

**Table 3  
Lockout/Tags-plus Log**

	Size Class	Affected Establishments	Systems Secured per Year	Time in Hours	Burden Hours	Authorized employee	Total Cost
Shipyards	1000 & Up	36	34,991	.08	2,799	\$27.69	\$77,504
	500-999	29	3,548	.08	284	\$27.69	\$7,864
	200-499	34	25,476	.08	2,038	\$27.69	\$56,432
	100-199	44	31,459	.08	2,517	\$27.69	\$69,696
	20-99	30	1,328	.08	106	\$27.69	\$2,935
Offsite	20-99*	82	2,481	.08	198	\$27.69	\$5,483
	1-19*	384	6,579	.08	526	\$27.69	\$14,565
<b>Commercial Fishing</b>							
Commercial Fishing	1000 & Up	7	2,919	.08	234	\$16.29	\$3,812
	500-999	3	583	.08	47	\$16.29	\$766
	200-499	1	149	.08	12	\$16.29	\$195
	100-199	10	618	.08	49	\$16.29	\$798
	20-99	21	379	.08	30	\$16.29	\$4889
	1-19	1,099	3,564	.08	285	\$16.29	\$4,643
<b>Fish Processing</b>							
Fish Processing	1000 & Up	44	11,636	.08	931	\$34.03	\$31,682
	500-999	10	933	.08	75	\$34.03	\$2,552
	200-499	8	1,002	.08	80	\$34.03	\$2,722
	100-199	15	982	.08	79	\$34.03	\$2,688
	20-99	41	1,175	.08	94	\$34.03	\$3,199
	1-19	96	558	.08	45	\$34.03	\$1,531
<b>Tug &amp; Towing Services</b>							
Tug & Towing Services	1000 & Up	45	317	.08	25	\$50.62	\$1,266
	500-999	14	94	.08	8	\$50.62	\$405

<sup>7</sup>The number of authorized employees was estimated based on the number of authorized employees in the FEA and the change in total employment from 2007 to 2001 as reported by County Business Patterns. The number of systems per authorized employee was then estimated using the number of systems per authorized employee based on the FEA.



	Size Class	Affected Establishments	Systems Secured per Year	Time in Hours	Burden Hours	Authorized employee	Total Cost
	200-499	5	48	.08	4	\$50.62	\$202
	100-199	16	154	.08	12	\$50.62	\$607
	20-99	88	839	.08	67	\$50.62	\$3,392
	1-19	471	4,484	.08	359	\$50.62	\$18,173
Passenger Vessels	20-99	21	199	.08	16	\$50.62	\$810
	1-19	105	987	.08	79	\$50.62	\$3,999
	<b>TOTAL</b>	<b>2,759</b>	<b>137,446</b>		<b>10,999</b>		<b>\$318,410</b>

### Notification Application and Removal of the Lockout/Tags-plus Systems:

Paragraph (e)(1)(ii) requires the employer to notify each affected employee that the machinery, equipment or system will be shut down and deenergized prior to servicing, and that a lockout/tags-plus system will be implemented.

Paragraph (i)(1)(i) requires the authorized employee to notify all other authorized and affected employees that the lockout/tags-plus system will be removed before removing any lockout/tags-plus system and restoring the machinery, equipment, or system to use.

Paragraph (l)(2) requires the host employer, in multi-employer worksites, to inform each contract employer about the content of the host employer's lockout/tags-plus program and procedures; and to instruct each contract employer to follow the host employer's lockout/tags-plus program and procedures. Also, the host employer must ensure that the lockout/tags-plus coordinator knows about all servicing operations and communicates this information with each contract employer who performs servicing or works in an area where servicing is being conducted.

Paragraph (n)(3)(iv) requires that each lock and tag indicate the identity of the authorized employee applying it. Paragraph (n)(3)(v) requires that each tag warn against hazardous conditions that could arise if the machinery, equipment, or system is energized. In addition, the tag must include a legend such as one of the following: Do Not Start; Do Not Open; Do Not Close; Do Not Energize; Do Not Operate.

The FEA estimates the power sources considered in this analysis include electrical (primary), air, hydraulic, and steam (primary); electrical (secondary); air, hydraulic, and steam (secondary); and all non-vessel sources (for example, electrical panel boxes in buildings and in off-site establishments) to which locks or tags-plus systems are applied. Based on the FEA, OSHA estimated six electrical systems and one air hydraulic system per authorized employee.

Economic assumptions for Electrical Systems or Equipment include:

- o Large shipyards and commercial vessel industries (those with 500 or more workers) are already employing some form of energy control when performing work on electrical systems or equipment. OSHA estimates that those shipyards and commercial-vessel

industries will not incur any additional costs associated with applying a lockout or tags-plus system.

- o OSHA estimates that medium to small shipyards and commercial-vessel industries (those with fewer than 500 workers) do not currently employ any form of energy control when performing electrical work other than as required by 29 CFR part 1915, subpart J (Ship's Machinery and Piping Systems), and subpart L (Electrical Machinery).

The FEA estimates it will take two minutes (.03 hour) to go to the system, tag it, and attach a clip. The labor-time estimate also includes the time to notify the affected and other authorized employees of the application and removal of lockout or tags-plus devices. Also, OSHA estimates that it will take an additional 3 minutes (.05 minutes) of labor time to obtain the tag information. The application includes the necessary written requirements (See Table 4).

**Table 4**  
**Notification of the Application and Removal**  
**of the Lockout/Tags-plus System**  
**(Burden and Cost for Electrical Systems)**

Industry Name	Size Class	Affected Establishments	Number of Electrical Systems	Time in Hours	Total Burden Hours	Affected Worker Wage Rate	Cost
Shipyards	1000 & Up	36	29,992	0	0	\$22.78	\$0
	500-999	29	3,041	0	0	\$22.78	\$0
	200-499	34	23,757	.08	1901	\$22.78	\$43,305
	100-199	44	29,635	.08	2,371	\$22.78	\$54,011
	20-99	30	1,189	.08	95	\$22.78	\$2,164
Contractor/ Offsite	20-99*	82	2,247	.08	180	\$22.78	\$4,400
	1-19*	384	6,127	.08	790	\$22.78	\$11,162
<hr/>							
Commercial Fishing Vessels	1000 & Up	7	2,502	0	0	\$16.29	\$0
	500-999	3	500	0	0	\$16.29	\$0
	200-499	1	127	.08	10	\$16.29	\$163
	100-199	10	528	.08	42	\$16.29	\$684
	20-99	21	322	.08	26	\$16.29	\$424
	1-19	1,099	2,899	.08	232	\$16.29	\$3,779
<hr/>							
Fish Processing Vessels	1000 & Up	44	9,974	0	0	\$19.37	\$0
	500-999	10	800	0	0	\$19.37	\$0
	200-499	8	857	.08	69	\$19.37	\$1,337
	100-199	15	840	.08	67	\$19.37	\$1,298

Industry Name	Size Class	Affected Establishments	Number of Electrical Systems	Time in Hours	Total Burden Hours	Affected Worker Wage Rate	Cost
	20-99	41	1,002	.08	80	\$19.37	\$1,550
	1-19	96	465	.08	37	\$19.37	\$717
Tug & Towing Services	1000 & Up	45	272	0	0	\$33.32	\$0
	500-999	14	83	0	0	\$33.32	\$0
	200-499	5	39	.08	3	\$33.32	\$100
	100-199	16	131	.08	10	\$33.32	\$333
	20-99	88	707	.08	57	\$33.32	\$1,899
	1-19	471	3,778	.08	302	\$33.32	\$10,063
Passenger Vessels	20-99	21	166	.08	13	\$33.32	\$433
	1-19	105	831	.08	66	\$33.32	\$2,199
	<b>TOTAL</b>	<b>2,759</b>	<b>122,811</b>		<b>6,051</b>		<b>\$139,721</b>

[a] The number of electrical systems is estimated based on the number of authorized employees (see Table 7) assuming that the number of electrical systems per authorized is the same as that used in the FEA.  
Source: Office of Regulatory Analysis, OSHA.

## Economic Assumptions for Air and Hydraulic Power Sources.

The FEA estimated that an authorized employee will expend one hour to go to the system, tag it, and attach a clip. This one hour includes the labor-time to notify the affected workers of the application and removal of lockout or tags-plus devices.

Paragraph (l)(2) requires the host employer, in multi-employer worksites, to inform each contract employer about the content of the host employer's lockout/tags-plus program and procedures; and to instruct each contract employer to follow the host employer's lockout/tags-plus program and procedures. Also, the host employer must ensure that the lockout/tags-plus coordinator knows about all servicing operations and communicates this information with each contract employer who performs servicing or works in an area where servicing is being conducted.

Paragraph (n)(3)(iv) requires that each lock and tag indicate the identity of the authorized employee applying it. Paragraph (n)(3)(v) requires that each tag warn against hazardous conditions that could arise if the machinery, equipment, or system is energized. In addition, the tag must include a legend such as one of the following: Do Not Start; Do Not Open; Do Not Close; Do Not Energize; Do Not Operate.

**Table 5**  
**Notification of the Application and Removal**  
**of the Lockout-tags plus System**  
**(Burden and Cost for Air or Hydraulic Systems)**

Industry Name	Size Class	Number of Establishments	Number of Air or Hydraulic Systems	Time in Hours	Total Burden Hours	Authorized Employee Wage/Rate	Cost
Shipyard	1000 & Up	36	4,999	1	4,999	\$27.69	\$138,422
	500-999	29	507	1	507	\$27.69	\$14,039
	200-499	34	1,719	1	1,719	\$27.69	\$47,599
	100-199	44	1,824	1	1,824	\$27.69	\$50,507
	20-99	30	140	1	140	\$27.69	\$3,877
	Contractor/Off-Site	20-99*	82	234	1	234	\$27.69
1-19*		384	452	1	452	\$27.69	\$12,516
Commercial Fishing Vessels	1000 & Up	7	417	1	417	\$16.29	\$6,793
	500-999	3	83	1	83	\$16.29	\$1,352
	200-499	1	22	1	22	\$16.29	\$358
	100-199	10	90	1	90	\$16.29	\$1,466
	20-99	21	57	1	57	\$16.29	\$929
	1-19	1,099	665	1	665	\$16.29	\$10,883
Fish Processing Vessels	1000 & Up	44	1,662	1	1,662	\$34.03	\$56,558

Industry Name	Size Class	Number of Establishments	Number of Air or Hydraulic Systems	Time in Hours	Total Burden Hours	Authorized Employee Wage/Rate	Cost
	500-999	10	133	1	133	\$34.03	\$4,526
	200-499	8	144	1	144	\$34.03	\$4,900
	100-199	15	142	1	142	\$34.03	\$4,832
	20-99	41	174	1	174	\$34.03	\$5,921
	1-19	96	93	1	93	\$34.03	\$3,165
<b>Tug &amp; Towing Services</b>	<b>1000 &amp; Up</b>	<b>45</b>	<b>45</b>	<b>1</b>	<b>45</b>	<b>\$50.62</b>	<b>\$2,278</b>
	500-999	14	14	1	14	\$50.62	\$709
	200-499	5	7	1	7	\$50.62	\$354
	100-199	16	24	1	24	\$50.62	\$1,215
	20-99	88	132	1	132	\$50.62	\$6,681
	1-19	471	708	1	708	\$50.62	\$35,839
<b>Passenger Vessels</b>	<b>20-99</b>	<b>21</b>	<b>32</b>	<b>1</b>	<b>32</b>	<b>\$50.62</b>	<b>\$1,620</b>
	1-19	105	156	1	156	\$50.62	\$7,897
	<b>Total</b>	<b>2,759</b>	<b>14,675</b>		<b>14,675</b>		<b>\$431,665</b>

### Training Certification

Paragraph (o)(7) requires employers to keep records of training that has been accomplished by workers, and that this training is current. The training record must contain, at least, each worker's name, the date of training, and the subject matter of the training.

To estimate the number of authorized and affected workers who must be trained, the FEA has included as authorized and affected workers those workers engaged in lockout/tags-plus applications. The FEA estimates that three minutes (.05 hour) of secretarial time will be needed per worker to develop and maintain training records.

**Table 7  
Training Certification  
(Burden Hours and Costs)**

	Size Class	Authorized Employees	Time in Hours	Burden Hours	Secretary's Wage Rate	Costs
Shipyard	1000 & Up	4,999	.05 hour	250	\$19.62	\$4,905
	500-999	507	.05 hour	25	\$19.62	\$491
	200-499	636	.05 hour	32	\$19.62	\$628
	100-199	359	.05 hour	18	\$19.62	\$353
	20-99	105	.05 hour	5	\$19.62	\$98
Contractor/ Off-site	20-99	157	.05 hour	8	\$19.62	\$157
	0-19	176	.05 hour	9	\$19.62	\$177

	Size Class	Authorized Employees	Time in Hours	Burden Hours	Secretary's Wage Rate	Costs
	<b>TOTAL</b>	<b>6,939</b>		<b>347</b>		<b>\$6,809</b>
Commercial Fishing	1000 & Up	417	.05 hour	21	\$19.62	\$412
	500-999	83	.05 hour	4	\$19.62	\$78
	200-499	21	.05 hour	1	\$19.62	\$20
	100-199	85	.05 hour	4	\$19.62	\$78
	20-99	47	.05 hour	2	\$19.62	\$39
	0-19	118	.05 hour	6	\$19.62	\$118
	<b>TOTAL</b>	<b>771</b>		<b>38</b>		<b>\$745</b>
Fish Processing	1000 & Up	1,662	.05 hour	83	\$19.62	\$1,629
	500-999	133	.05 hour	7	\$19.62	\$137
	200-499	140	.05 hour	7	\$19.62	\$137
	100-199	135	.05 hour	7	\$19.62	\$137
	20-99	153	.05 hour	8	\$19.62	\$157
	0-19	46	.05 hour	2	\$19.62	\$39
	<b>TOTAL</b>	<b>2,269</b>		<b>114</b>		<b>\$2,236</b>
Tug & Towing	1000 & Up	425	.05 hour	21	\$19.62	\$412
	500-999	169	.05 hour	8	\$19.62	\$157
	200-499	80	.05 hour	4	\$19.62	\$78
	100-199	144	.05 hour	7	\$19.62	\$137
	20-99	242	.05 hour	12	\$19.62	\$235
	0-19	123	.05 hour	6	\$19.62	\$118
	<b>TOTAL</b>	<b>1,183</b>		<b>58</b>		<b>\$1,137</b>
Passenger Vessels	20-99	53	.05 hour	3	\$19.62	\$59
	0-19	32	.05 hour	2	\$19.62	\$39
	<b>TOTAL</b>	<b>85</b>		<b>5</b>		<b>\$98</b>
Shipyard	1000 & Up	12,779	.05 hour	639	\$19.62	\$12,537
	500-999	2,476	.05 hour	124	\$19.62	\$2,433
	200-499	1,431	.05 hour	71	\$19.62	\$1,393
	100-199	1,248	.05 hour	62	\$19.62	\$1,216
	20-99	635	.05 hour	32	\$19.62	\$628
Contractor/Off-Site	20-99	445	.05 hour	22	\$19.62	\$432
	1-19	453	.05 hour	23	\$19.62	\$451
	<b>TOTAL</b>	<b>19,467</b>		<b>973</b>		<b>\$19,090</b>
Commercial Fishing	1000 & Up	834	.05 hour	42	\$19.62	\$824

	Size Class	Authorized Employees	Time in Hours	Burden Hours	Secretary's Wage Rate	Costs
	500-999	167	.05 hour	8	\$19.62	\$157
	200-499	42	.05 hour	2	\$19.62	\$39
	100-199	169	.05 hour	8	\$19.62	\$157
	20-99	93	.05 hour	5	\$19.62	\$98
	0-19	238	.05 hour	12	\$19.62	\$235
	<b>TOTAL</b>	<b>1,542</b>		<b>77</b>		<b>\$1,510</b>
Fish Processing	1000 & Up	3,324	.05 hour	166	\$19.62	\$3,257
	500-999	266	.05 hour	13	\$19.62	\$255
	200-499	279	.05 hour	14	\$19.62	\$275
	100-199	270	.05 hour	14	\$19.62	\$275
	20-99	307	.05 hour	15	\$19.62	\$294
	0-19	91	.05 hour	5	\$19.62	\$98
	<b>TOTAL</b>	<b>4,537</b>		<b>227</b>		<b>\$4,454</b>
Tug & Towing	1000 & Up	850	.05 hour	43	\$19.62	\$844
	500-999	338	.05 hour	17	\$19.62	\$334
	200-499	161	.05 hour	8	\$19.62	\$157
	100-199	288	.05 hour	14	\$19.62	\$275
	20-99	484	.05 hour	24	\$19.62	\$471
	0-19	246	.05 hour	12	\$19.62	\$235
	<b>TOTAL</b>	<b>2,367</b>		<b>118</b>		<b>\$2,316</b>
Passenger Vessels	20-99	105	.05 hour	5	\$19.62	\$98
	1-19	64	.05 hour	3	\$19.62	\$59
	<b>Total</b>	<b>169</b>		<b>8</b>		<b>\$157</b>
<b>TOTAL</b>		<b>39,330</b>		<b>1,965</b>		<b>\$38,552</b>

### Incident Investigations

Paragraph (p)(1) requires that the employer investigate each incident that resulted in, or could reasonably have resulted in, the energization or startup or the release of hazardous energy, while servicing machinery, equipment, or systems. Paragraph (p)(2) specifies that the incident investigation must be initiated no later than 24 hours after occurrence.

Paragraph (p)(4) requires the employer to prepare a written report of the investigation that includes: the date of the incident; date and time the incident investigation began; location and description of the incident; factors contributing to the incident; and a copy of the lockout/tags-plus log that was current at the time of the incident. OSHA estimates that the recordable incident is one percent of all systems subject to the standard per year. The incident investigation and written report will take five workdays (40 hours) of an authorized employee's time to complete.

**Table 6  
Incident Investigation  
(Burden and Cost)**

	Size Class	Affected Establishments	Total Systems	Total (1%) Reportable Incidents	Time in Hours	Total Hours (Rounded)	Authorized Worker Wage Rate	Cost
Shipyards	1000 & Up	36	34,991	350	40	14,000	\$27.69	\$387,660
	500-999	29	3,548	35	40	1,400	\$27.69	\$38,766
	200-499	34	25,476	255	40	10,200	\$27.69	\$282,438
	100-199	44	31,459	315	40	12,600	\$27.69	\$348,894
	20-99	30	1,328	13	40	520	\$27.69	\$14,399
	Offsite	20-99*	82	2,481	25	40	1,000	\$27.69
	1-19*	384	6,579	66	40	2,640	\$27.69	\$73,102
<b>Commercial Fishing</b>								
Commercial Fishing	1000 & Up	7	2,919	29	40	1,160	\$16.29	\$1,889
	500-999	3	583	6	40	240	\$16.29	\$3,910
	200-499	1	149	1	40	40	\$16.29	\$652
	100-199	10	618	6	40	240	\$16.29	\$3,910
	20-99	21	379	4	40	160	\$16.29	\$2,606
	1-19	1,099	3,564	36	40	1,440	\$16.29	\$23,458
<b>Fish Processing</b>								
Fish Processing	1000 & Up	44	11,636	116	40	4,640	\$34.03	\$157,899
	500-999	10	933	9	40	360	\$34.03	\$12,251
	200-499	8	1,002	10	40	400	\$34.03	\$13,612
	100-199	15	982	10	40	400	\$34.03	\$13,612
	20-99	41	1,175	12	40	480	\$34.03	\$16,334
	1-19	96	558	6	40	240	\$34.03	\$8,167
<b>Tug &amp; Towing Services</b>								
Tug & Towing Services	1000 & Up	45	317	3	40	120	\$50.62	\$6,074
	500-999	14	97	1	40	40	\$50.62	\$2,025
	200-499	5	46	0	40	0	\$50.62	\$0
	100-199	16	155	2	40	80	\$50.62	\$4,050
	20-99	88	839	8	40	320	\$50.62	\$16,198
	1-19	471	4,486	45	40	1800	\$50.62	\$91,116
<b>Passenger Vessels</b>								
Passenger Vessels	20-99	21	199	2	40	80	\$50.62	\$4,050
	1-19	105	987	10	40	400	\$50.62	\$20,248
	<b>TOTAL</b>	<b>2,759</b>	<b>137,486</b>	<b>1,375</b>		<b>55,000</b>		<b>\$1,592,017</b>

**Program Audits**



Paragraph (q)(1) requires the employer to conduct an audit of the lockout/tags-plus program and procedures at least annually to ensure that the procedures and the requirements of this Standard are being followed, and to correct any deficiencies.

Paragraph (q)(4) requires the employer to prepare a written audit report that includes at least: (i) the date of the audit; (ii) the identity of the individuals who performed the audit; (iii) the identity of the procedure and the machinery, equipment or system being audited; (iv) the results of the program audit and recommended actions to correct deviations or deficiencies identified; (v) any incident investigation reports since the previous audit; and (vi) corrective actions the employer has taken in response to the audit findings and recommendations.

Conducting an audit of the energy-control procedures will ensure that the current procedures being used are appropriate in protecting workers. The purpose of this audit is to correct and to identify any deviations or inadequacies in the procedures that need to be corrected.

The FEA estimates that an authorized employee and a supervisor take an average of 30 minutes (.50 hour) each, for a total of 1.00 hour, to correct any deviations or inadequacies in the procedures that were identified for each establishment. In addition to this time, the supervisor takes 20 minutes (.33 hour), to develop and maintain a written audit report, for a total burden of one hour and 20 minutes (1.33 hour) per establishment. OSHA estimates that each of the 2,759 establishments will conduct one program audit each year. In determining the hourly cost, OSHA used the following hourly cost equation:

Shipyards:

**Hourly cost** = ((.5 hour x authorized employee wage rate (\$27.69 per hour)) + (.5 hour x supervisory wage rate (\$38.50 per hour))) + (.33 hour x supervisory wage rate (\$38.50 per hour)) = \$45.81 per hour

**Burden hours:** 639 establishments x 1 audit annually x 1.33 hours = 850 hours.

**Cost:** 850 hours x \$45.81 per hour = \$38,939

Commercial Fishing:

**Hourly Cost** = ((.5 hour x authorized employee wage rate (\$16.29 per hour)) + (.5 hour x supervisory wage rate (\$20.35 per hour))) + (.33 hour x supervisory wage rate (\$20.35 per hour)) = \$25.05 per hour

**Burden hours:** 1,141 establishments x 1 audit annually x 1.33 hours = 1,518 hours.

**Cost:** 1,518 hours x \$25.05 per hour = \$38,026

Fish Processing Vessels:

**Hourly Cost** = ((.5 hour x authorized employee wage rate (\$34.03 per hour)) + (.5 hour x supervisory wage rate (\$35.91 per hour))) + (.33 hour x supervisory wage rate (\$35.91 per hour)) = \$46.83 per hour

**Burden hours:** 214 establishments x 1 audit annually x 1.33 hours = 285 hours.

**Cost:** 285 hours x \$46.83 per hour = \$13,349

Tug & Towing Services:

**Hourly Cost** = ((.5 hour x authorized employee wage rate (\$50.62 per hour)) + (.5 hour x supervisory wage rate (\$48.08 per hour))) + (.33 hour x supervisory wage rate (\$48.08 per hour)) = \$65.22 per hour

**Burden hours:** 639 establishments x 1 audit annually x 1.33 hours = 850 hours.

**Cost:** 850 hours x \$65.22 per hour = \$55,437

Passenger Vessels:

**Hourly Cost** = ((.5 hour x authorized employee wage rate (\$50.62 per hour)) + (.5 hour x supervisory wage rate (\$48.08 per hour))) + (.33 hour x supervisory wage rate (\$48.08 per hour)) = \$65.22 per hour

**Burden hours:** 126 establishments x 1 audit annually x 1.33 hours = 168 hours.

**Cost:** 168 hours x \$65.22 per hour = \$10,957

**Total Burden Hours:** 850 hours + 1,518 hours + 285 hours + 850 hours + 168 hours = 3,671 hours

**Total Cost:** \$38,939 + \$38,026 + \$13,349 + \$55,437 + \$10,957 = \$156,708

**Responses:** 639 + 1,141 + 214 + 639 + 126 = 2,759

### Disclosure of Records to OSHA Compliance Officers

Employers would provide OSHA access to records required to be maintained by subpart F. OSHA believes that approximately 39 establishments<sup>8</sup> covered by the subpart would be subject to an OSHA inspection and required to disclose these records annually. OSHA estimates that it takes a supervisor five minutes (.08 hour) to disclose the requested information.

The wage rates for a supervisor are an average of the rates for shipyard, commercial fishing, fish-processing vessels, and water transportation employment:  $(\$38.50 + \$48.08 + \$35.91 + \$20.35) / 4 = \$35.71$

**Burden hours:** 39 establishments inspected x .08 hour = 3

**Cost:** 3 hours x \$35.71 = \$107

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<sup>8</sup>OSHA estimated the number of inspections by determining the inspection rate (1.4%) for all establishments under the jurisdiction of the Act (including both Federal OSHA and approved state-plan agencies) and then multiplying the total number of establishments covered by the standard (i.e., 2,759) by this percentage (i.e., 2,759 establishments x 1.4% = 39 inspections).

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 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.

Paragraph (n)(3)(iv) requires that each lock and tag indicate the identity of the authorized employee applying it. Paragraph (n)(3)(v) requires that each tag warn against hazardous conditions that could arise if the machinery, equipment, or system is energized. In addition, the tag must include a legend such as one of the following: Do Not Start; Do Not Open; Do Not Close; Do Not Energize; Do Not Operate. The Agency is estimating the cost of a tag is \$1.00 at an average use of 7 times per tag. The cost for each tag and tie is 0.17 cents.

**Table 8**  
**Per Unit Costs of a Tag**

	Size Class	Affected Establishments	Systems Secured per Year	Seven Uses per Tag of Systems Secured	Cost per Tag and a Tie	Total Cost
Shipyards	1000 & Up	36	34,991	4,999	\$0.17	\$850
	500-999	29	3,548	507	\$0.17	\$86
	200-499	34	25,476	3,639	\$0.17	\$619
	100-199	44	31,459	4,494	\$0.17	\$764
	20-99	30	1,328	190	\$0.17	\$32
Offsite	20-99	82	2,481	354	\$0.17	\$60
	0-19	384	6,579	940	\$0.17	\$160
Commercial Fishing	1000 & Up	7	2,919	417	\$0.17	\$71

	Size Class	Affected Establishments	Systems Secured per Year	Seven Uses per Tag of Systems Secured	Cost per Tag and a Tie	Total Cost
	500-999	3	583	83	\$0.17	\$14
	200-499	1	149	21	\$0.17	\$4
	100-199	10	615	88	\$0.17	\$15
	20-99	21	379	54	\$0.17	\$9
	0-19	1,099	3,564	509	\$0.17	\$87
Fish Processing	1000 & Up	44	11,636	1,662	\$0.17	\$283
	500-999	10	933	133	\$0.17	\$23
	200-499	8	1,002	143	\$0.17	\$24
	100-199	15	982	140	\$0.17	\$24
	20-99	41	1,175	168	\$0.17	\$29
	0-19	96	558	80	\$0.17	\$14
Tug & Towing Services	1000 & Up	45	317	45	\$0.17	\$8
	500-999	14	94	13	\$0.17	\$2
	200-499	5	48	7	\$0.17	\$1
	100-199	16	154	22	\$0.17	\$4
	20-99	88	839	120	\$0.17	\$20
	0-19	471	4,484	641	\$0.17	\$109
Passenger Vessels	20-99	21	199	28	\$0.17	\$5
	0-19	105	987	141	\$0.17	\$24
	<b>TOTAL</b>	<b>2,759</b>	<b>137,482</b>	<b>19,638</b>		<b>\$3,341</b>

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.

OSHA estimates that a compliance officer (GS-12, step 5), with an hourly wage rate of \$37.74<sup>9</sup>, spends about five minutes (.08 hour) during an inspection reviewing the documents required by subpart F. The Agency determined that its compliance officers would conduct approximately 38 inspections under subpart F during each year covered by this ICR (see footnote 4). OSHA considers other expenses, such as equipment, overhead, and support staff salaries to be normal

<sup>9</sup> Source: U.S. Office of Personnel Management; *Salary Table 2014-RUS*, Office of Personnel Management; [http://www.opm.gov/policy-data-oversight/pay-leave/salaries-wages/salary-tables/pdf/2014/RUS\\_h.pdf](http://www.opm.gov/policy-data-oversight/pay-leave/salaries-wages/salary-tables/pdf/2014/RUS_h.pdf)

operating expenses that would occur without the paperwork requirements specified by subpart F. Therefore, the total cost of these paperwork requirements to the Federal government is:

$$\text{Cost: } 39 \text{ inspections} \times .08 \text{ hour} \times \$37.74 = \$118$$

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

OSHA is requesting an adjustment increase of 1,731 hours, from 99,645 to 101,376 hours. The increase in hours is a result of updated data showing an increase in the number of affected establishments covered by the standard from 2,725 to 2,759.

**Table 9 -- Summary of Burden Hours and Costs**

<b>Collection of Information</b>	<b>Burden Hours</b>	<b>Cost</b>	<b>Total Number of Responses</b>
Marking Location of Stretchers (§1915.87(f)(3))	3	\$93	17
Lockout/tags-plus Procedures (§1915.89(b))	9,009	\$343,754	2,840
Lockout/tag-plus Log (§1915.89(c)(7)(iv))	10,999	\$318,387	137,446
Notification of the Application and Removal of the Lockout or tags-plus System for the Electrical Devices (§1915.89(e)(1) and (i)(1)(i))	6,051	\$139,721	122,811
Notification of the Application and Removal of the Lockout or tags-plus System for the Air and Hydraulic Power Sources (§1915.89(e)(1), (1)(2), (n)(3)(1v), and (i)(1)(i))	14,675	\$431,665	14,675
Training Certification (§1915.89(o)(7))	1,965	\$38,552	39,330
Preparing Written Reports of the Incident Investigation (§1915.89(p)(4))	55,000	\$1,592,017	1,375
Program Audits (§1915.89(q)(4))	3,671	\$156,708	2,759
Disclosure of Records to OSHA (§1915.89(r)(2))	3	\$107	39
<b>TOTAL</b>	<b>0</b>	<b>0</b>	<b>0</b>

**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 revised subpart F.

**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 the Federal register notice announcing OMB approval of the Information collection requirement, (see 5 CFR 1320.3(f)(3)). OSHA believes that this is the most appropriate and accurate mechanism to inform interested parties of these expiration dates.

**18. Explain each exception to the certification statement.**

OSHA is not seeking an exception to the certification statement.

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

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