## SUPPORTING STATEMENT FOR THE INFORMATION COLLECTION REQUIREMENTS OF SUBPART A ("GENERAL PROVISIONS") AND SUBPART B ("CONFINED AND ENCLOSED SPACES AND OTHER DANGEROUS ATMOSPHERES IN SHIPYARD EMPLOYMENT") (29 CFR PART 1915)<sup>1</sup> OFFICE OF MANAGEMENT AND BUDGET (OMB) CONTROL NO. 1218-0011 (March 2018)

## 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 ("OSH Act") is to "assure so far as possible every working man and woman in the Nation safe and healthful working conditions and to preserve our human resources" (29 U.S.C. 651(b)). To achieve this objective, the OSH Act specifically authorizes "the development and promulgation of occupational safety and health standards" (29 U.S.C 651).

Section 6(b)(7) of the OSH Act states 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 employees 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" (29 U.S.C. 655). The OSH Act also 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 the Act. . . ." (29 U.S.C. 657).

Under the authority granted by the OSH Act, the Occupational Safety and Health Administration ("OSHA" or "the Agency") adopted 29 CFR part 1915, subparts A ("General Provisions") and B ("Confined and Enclosed Spaces and Other Dangerous Atmospheres") for shipyard employment. One provision in subpart A contains paperwork requirements (§1915.7). Section 1915.7(b)(2) specifies that shipyard employers must maintain a roster of designated competent persons (for inspecting and testing spaces covered by subpart B), or a statement that a Marine Chemist will perform these inspections and tests. Section 1915.7(d) requires employers: ensure that competent persons, Marine Chemists, and certified industrial hygienists (CIHs) make a record of each inspection and test they conduct, post the record near the covered space while work is in

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

progress, and file the record for a specified period. In addition, employers must make the roster or statement and the inspection and test records available to designated parties on request.

Subpart B consists of several standards governing entry into confined and enclosed spaces and other dangerous atmospheres in shipyard employment. These standards require that employers:

- Ensure that competent persons conduct inspections and atmospheric testing prior to workers entering a confined or enclosed space (§§1915.12(a)–(c));
- Warn workers not to enter hazardous spaces and other dangerous atmospheres (§§1915.12 (a)-(c), §1915.16);
- Certify that workers who will be entering confined or enclosed spaces are trained (§1915.12(d) (5));
- Establish and train shipyard rescue teams or arrange for outside rescue teams and provide them with information (§1915.12(e));
- Ensure that one person on each rescue team maintains a current first aid training certificate (§1915.12(e));
- Exchange information regarding hazards, safety rules, and emergency procedures concerning these spaces and atmospheres with other employers whose workers may enter these spaces and atmospheres (§1915.12(f));
- Ensure testing of spaces having contained combustible or flammable liquids or gases, and toxic, corrosive, or irritating substances, and other dangerous atmospheres, boundaries or pipelines before cleaning and other cold work is started and as necessary thereafter while the operations are ongoing (§1915.13(b)(2) and (4));
- Post signs prohibiting ignition sources within or near a space that contains bulk quantities of flammable or combustible liquids or gases (§1915.13(b)(10));
- Ensure that confined and enclosed spaces are tested before workers perform hot work in these work areas (§1915.14(a));
- Post warnings of testing conducted by competent persons and certificates of testing conducted by a Marine Chemist or Coast Guard authorized person in the immediate vicinity of the hot-work operation while the operation is in progress (§§1915.14(a) and (b)); and
- Retain certificates of testing on file for at least three months after completing the operation (\$1915.14(a)(2)).

Items 2 and 12 below describe in detail the specific information collection requirements of the subparts A and B.

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.

## **GENERAL PROVISIONS (SUBPART A)**

#### **Competent Person (§1915.7)**

#### Designation (§1915.7(b)); and Recordkeeping (§1915.7(d))

Description of the requirements. Paragraph (b)(2) states that employers must designate one or more competent persons to perform required inspections and tests, unless a Marine Chemist will do so. The paragraph also requires that employers maintain a roster of designated competent persons or a statement that a Marine Chemist will perform all required inspections and tests. In addition, employers are to ensure that the rosters contain, at a minimum, the employer's name, the name of the designated competent persons, and the date the workers completed training as a competent person.<sup>2</sup> If requested, employers must make the roster or statement available to workers, their representatives, OSHA compliance officers, and representatives from the National Institute for Occupational Safety and Health (NIOSH).

Paragraph (d)(1) specifies that employers ensure that competent persons, Marine Chemists, and Certified Industrial Hygienists (CIHs) make a record of each inspection and test they conduct. The record of the inspection or test must contain the employer's location; time, date, location of the inspected space; the operations performed; test results; and any instructions. Paragraph (d)(2) requires that employers post the record in the immediate vicinity of the inspected space while workers are working in the space. Employers must maintain the record for at least three months after work in the space is complete. In addition, paragraph (d)(3) requires that employers make inspection and test records available, upon request, to workers, their representatives, OSHA compliance officers, and NIOSH.

<u>Use and purpose of the requirements</u>. Maintaining the required roster or statement as specified by paragraph (b) assures workers and OSHA that competent persons are performing the inspections and tests. The recordkeeping requirement under paragraph (d) provides important information regarding the inspection and test results. The information allows employers to implement atmospheric controls and other safety procedures to furnish workers with a safe and healthful workplace. It also permits workers to determine whether the required testing has been done and the appropriateness of instructions, controls and procedures to protect workers entering those spaces. The inspection and test records may be useful to NIOSH for research purposes.

<sup>2</sup>Subpart A contains no training requirements for competent persons.

## CONFINED AND ENCLOSED SPACES AND OTHER DANGEROUS ATMOSPHERES IN SHIPYARD EMPLOYMENT (SUBPART B)

Precautions and the Order of Testing Before Entering Confined and Enclosed Spaces and Other Dangerous Atmospheres (§1915.12)

Oxygen Content (§ 1915.12(a)(1) and (a)(2)); Flammable Atmospheres (§§1915.12(b)(1)) and (b)(2)); and Toxic, Corrosive, Irritant or Fumigated Atmospheres and Residues (§§1915.12(c)(1), (c)(2), and (c)(3))

<u>Description of the requirements</u>. Before a worker initially enters a space, paragraph (a) (1) requires employers to ensure that a competent person visually inspects and tests it to determine its atmospheric oxygen content. Spaces subject to this requirement include:

 $\cdot\,$  Sealed spaces such as, but not limited to, coated and closed up spaces, and freshly painted, non-ventilated spaces;

• Spaces that contain materials or residues of material that can cause it to become oxygen deficient; spaces and adjacent spaces that contain or have contained combustible or flammable liquids or gases, or that contain or previously contained toxic, corrosive, or irritant liquids, gases, or solids; and

· Fumigated and adjacent spaces.

If the space has an oxygen-deficient atmosphere, paragraph (a)(2) specifies that employers must label the space "Not Safe for Workers." For oxygen-enriched spaces, the label must read "Not Safe for Workers--Not Safe for Hot Work." Employers must ventilate these spaces with a sufficient volume and flow rate to maintain the oxygen content at or above 19.5 percent and below 22.0 percent by volume, at which point they may remove the warning label.

Under paragraph (b)(1), employers must have a competent person visually inspect a space or adjacent space for combustible or flammable liquids or gases. If such liquids or gases are present, the competent person must test the atmospheric concentration prior to a worker's entry. If the concentration is equal to or greater than 10 percent of the lower explosive limit (LEL), paragraph (b)(2) specifies that the employer must label the space "Not Safe for Workers-Not Safe for Hot Work." Employers must provide ventilation at a volume and flow rate that maintains the concentration of flammable vapors below 10 percent of the LEL; the employer may remove the warning label when the vapors reach this level.

Paragraph (c)(1) mandates that if a space or adjacent space contains or previously contained liquids, gases, or solids that are toxic, corrosive, or an irritant, employers must have a competent person visually inspect the space to determine whether these substances are present. If so, the competent person must test the atmospheric concentration before a worker may enter the space. Under paragraph (c)(2), employers must label the space "Not Safe for Workers" if the

air concentration of these substances exceeds the permissible exposure level (PEL), specified by 29 CFR 1915, subpart Z ("Toxic and Hazardous Substances"), or is immediately dangerous to life or health (IDLH).<sup>3</sup> Employers must provide a sufficient ventilation volume and flow rate to maintain the atmospheric concentration at or below the PEL or below the IDLH if there is no PEL, after which they may remove the warning labels. Paragraph (c)(3) specified that if, after ventilation, the concentrations are not at or below the PEL or below the IDLH, employers must have a Marine Chemist or CIH retest the space until they can certify it as "Enter with Restrictions"<sup>4</sup> or "Safe for Workers."

<u>Use and purpose of the requirements</u>. The records of inspections and tests provide employers with important information on whether controls and other safety procedures are working effectively and adequately protecting workers who enter confined or enclosed spaces. The information also permits workers and OSHA to determine whether the required inspections and testing has been conducted and whether workers are protected. Employers use the labels to warn workers not to enter hazardous spaces or, in accordance with paragraph (c)(3), that a space is safe to enter with or without restrictions. In this regard, employers determine that a space is hazardous based on visual inspections and tests showing that the space or an adjacent space contains inadequate or excessive oxygen levels; combustible or flammable atmospheres; or toxic, corrosive, or irritant substances that can contaminate the atmosphere. Accordingly, the labels prevent death or serious injury and illness among workers by reducing their exposure to these atmospheric hazards.

## Employee Training Certifications (§1915.12(d)(5))

Under paragraph (d)(5), employers must certify that each worker received the required training in accordance with paragraphs (d)(1) through (d)(4). Paragraphs (d)(1) through (d)(4) require employers to train workers who enter a confined and enclosed space or other dangerous atmospheres so they can perform their duties safely. The certification is to contain the worker's name, the name of the certifier, and the certification date, and be available for inspection by OSHA compliance officers, NIOSH, and workers and their representatives.

<u>Use and purpose of the requirements</u>. Establishing and maintaining written certification of the training provided to each worker affords employers and OSHA compliance officers with an efficient means to verify that workers received the required training. Workers and their representatives may use the certification to determine whether the employer has provided and accurately recorded the required training, while NIOSH may review the certifications for research purposes.

**<sup>3</sup>**Paragraph (b) of §1915.11 ("Scope, application and definitions applicable to this subpart") defines IDLH as "an atmosphere that poses an immediate threat to life or that is likely to result in acute or immediate severe health effects."

<sup>4</sup>As defined under §1915.11(b), the term "enter with restrictions" means "[denoting] a space where entry for work is permitted only if engineering controls, personal protective equipment, clothing, and time limitations are as specified by the Marine Chemist, Certified Industrial Hygienist, or the shipyard competent person."

#### Rescue Teams (§1915.12(e))

Description of the requirements. Under paragraph (e), employers must establish a shipyard rescue team, or arrange for an outside rescue team that will respond promptly to a request for rescue service. For shipyard-based rescue teams, paragraph (e)(1) specifies that employers must provide and train team members to use personal protective equipment necessary to make a rescue, train each team member to perform his/her rescue functions, ensure that the team practices its skills at least annually,<sup>5</sup> and have at least one person on a team maintain current first aid certificate.<sup>6</sup> If employers use an outside rescue team, paragraph (e)(2) requires the employer to inform the members of the team of the hazards they may encounter when called to rescue workers from confined and enclosed spaces or other dangerous atmospheres at the shipyard facility.

<u>Use and purpose of the requirements</u>. Employers use the first aid certificates, required by paragraph (e)(1)(iv), to ensure that on-site rescue teams will be fully prepared to render first aid when needed. Members of the outside rescue team use the hazard information provided by employers to implement the training and identify the equipment necessary to prevent or control exposure to atmospheric hazards during rescue operations.

## Exchanging Hazard Information Between Employers (§1915.12(f))

<u>Description of the requirement</u>. If an employer has workers who work in confined and enclosed spaces or other dangerous atmospheres, this paragraph requires the employer to inform other employers whose workers may enter the same space about the hazards, safety rules, and emergency procedures concerning those spaces and atmospheres.

<u>Use and purpose of the requirement</u>. Employers who receive the information use it to protect their workers from the specified hazards, comply with and inform their workers about the safety rules already established at the shipyard, and implement emergency procedures if necessary. Accordingly, the requirement prevents exposure of their workers to the hazards that are present in the space.

<sup>5</sup>During practice drills, team members must do rescue simulations using mannequins and rescue equipment involving physical facilities that closely approximate the facilities from which they may make a rescue.

<sup>6</sup>Including maintenance of an airway, control of bleeding, maintenance of circulation, and cardiopulmonary resuscitation.

## Cleaning and Other Cold Work (§1915.13)

#### Requirements for Performing Cleaning and Cold Work (§1915.13(b))

Description of the requirement. Paragraph (b)(2) requires that a competent person test the concentration of flammable, combustible, toxic, corrosive, or irritant vapors within the confined or enclosed space prior to workers beginning cleaning or cold work. Paragraph (b)(3) specifies that continuous ventilation must be provided at volumes and flow rates sufficient to ensure that the concentration of flammable vapor is maintained below 10 percent of the LEL, and toxic, corrosive, or irritant vapors are maintained within the PELs and below IDLH levels. Paragraph (b)(4) requires that the competent person conduct testing of the confined or enclosed space as often as necessary during cleaning or cold work to ensure that air concentrations remain at the levels specified in paragraph (b)(3).

Paragraph (b)(7) requires that the competent person test ventilation discharge areas and other areas where discharge vapors may collect to determine whether those vapors are accumulating in concentrations that are hazardous to workers. If accumulations are hazardous, all work in the contaminated areas must be stopped until the vapors have dissipated or been removed.

Paragraph (b)(10) requires that employers post signs in a prominent location that prohibit sources of ignition within or near a space that previously contained flammable or combustible liquids or gases in bulk quantities. Employers must post these signs at the entrance to the space, in adjacent spaces, and in the open area adjacent to those spaces.

<u>Use and purpose of the requirement</u>. The records of the periodic atmospheric testing provide employers with important information on whether the atmospheric controls and safety procedures are working effectively and adequately to protect workers during cleaning and cold work operations. The information also helps employers determine if more frequent testing is necessary. The information permits workers and OSHA to determine whether the required periodic testing has been performed and whether the employer's controls and procedures are providing adequate protection. NIOSH may review the testing records for research purposes. Employers use the signs required by paragraph (b)(10) to prevent workers from bringing sources of ignition into areas that may contain the residues of flammable or combustible liquids or gases. Accordingly, the signs prevent inadvertent ignition of these residues, and death or serious injury among workers that could result from such ignition.

#### Hot Work (§1915.14)

## Hot Work Requiring Testing by a Marine Chemist or Coast Guard Authorized Person (§§1915.14(a)(1) and (a)(2))

Description of the requirements. Under paragraph (a)(1), employers must have a Marine Chemist or a U.S. Coast Guard authorized person test and certify a work area as safe for hot work if the area is in or on any of the following confined and enclosed spaces and other dangerous atmospheres, boundaries of spaces, or pipelines: within, on, or immediately adjacent to spaces that contain or previously contained combustible or flammable liquids or gases or fuel tanks that contain or previously contained fuel; or pipelines, heating coils, pump fittings, or other accessories connected to spaces that contain or previously contained fuel.<sup>7</sup> Under paragraph (a) (2), employers must post the certificate in the immediate vicinity of the hot-work operation while the operation is in progress. On completion of the operation, they must file the certificate for at least three months.

<u>Use and purpose of the requirements</u>. Employers use the certificates as an efficient means of verifying that workers can perform hot work in work areas that are adjacent to spaces containing, or that previously contained, flammable liquids or gases. Posting the certificates allows employers to notify workers of work areas that are safe for performing hot work. Posting the certificates also allows workers and OSHA to verify whether the required testing has been conducted and whether the proper controls and procedures are in place to safely conduct hot work operations. Retaining the certificates for at least three months verifies that the employer performed the correct tests in the event that a worker show symptoms of exposure to hazardous materials.

## Hot Work Requiring Testing by a Competent Person (§§1915.14(b)(1) and (b)(2))

Description of the requirements. Paragraph (b)(1) specifies that before starting any hot work in or on the following spaces or adjacent spaces or other dangerous atmospheres, employers must have a competent person test and determine that the space does not contain concentrations of flammable vapors equal to or greater than 10 percent of the LEL: Dry cargo holds; bilges; engine rooms; boiler spaces; vessels and vessel sections; land-side confined and enclosed spaces; or other dangerous atmospheres not requiring certification by a Marine Chemist or Coast Guard authorized person. If the concentration of flammable vapors or gases is equal to or greater than 10 percent of the LEL in these or adjacent spaces, paragraph (b)(2) specifies that the employer must label the space "Not Safe for Hot Work." Employers must provide ventilation in the space at a volume and flow rate that maintains the concentration of flammable vapors below 10 percent of the LEL, after which they may remove the warning label.

<sup>7</sup>The provision specifies an exception for hot work performed on dry cargo, miscellaneous, or passenger vessels and land-side operations in spaces that meet the requirements for oxygen, flammability, and toxicity specified in §1915.12, but only if the flammable gases or liquids in the adjacent spaces have a flash point below  $150^{\circ}$  F (65.6° C) and the distance between these spaces and the hot work is at least 25 feet (7.62 m).

<u>Use and purpose of the requirements</u>. Employers use the test records as an efficient means of verifying that workers can perform hot work in the specific space. Posting the test results allows employers to notify workers of work areas that are safe for performing hot work. Posting the results also allows workers and OSHA to verify whether the required testing has been conducted and whether the proper controls and procedures are in place to safely conduct hot work operations. Employers use the labels to warn workers not to enter spaces containing hazardous levels of flammable vapors. Accordingly, the labels prevent death or serious injury and illness among workers by reducing their exposure to these atmospheric hazards.

## Maintenance of Safe Conditions (§1915.15)

## Alteration of Existing Conditions (§1915.15(b))

Description of the requirements. If a change occurs that may alter the atmospheric conditions within a previously tested confined or enclosed space or other dangerous atmosphere (e.g., opening a manhole or other closures, adjusting a valve that regulates the flow of hazardous materials), paragraph (b)(2) requires employers to stop work in the affected space or work area. Work may only resume after the affected space or area is visually inspected and retested and found to comply with the requirements of the subpart (§1915.12, §1915.13, and §1915.14).

<u>Use and purpose of the requirements</u>. The discussions under §§1915.12, 1915.13, and 1915.14 above explain the use and purpose of the paperwork requirements specified by these paragraphs.

## <u>Tests to Maintain the Conditions of a Marine Chemist's or Coast Guard Authorized Person's</u> <u>Certificates (§1915.15(c))</u>

<u>Description of the requirements</u>. This paragraph requires employers ensure that a competent person visually inspect and test each space certified as "Safe for Workers" or "Safe for Hot Work" as often as necessary to ensure that the atmospheric conditions in the space are maintained within the conditions established by the issued certificate.

<u>Use and purpose of the requirements</u>. See the discussions under §§1915.12(c)(3) and 1915.14(a)(1) above for an explanation for the certification requirements. In addition, the records of periodic inspections and testing allow employers to determine whether testing is being done at appropriate intervals and whether more frequent testing may be necessary.

## <u>Change in the Conditions of a Marine Chemist's or Coast Guard Authorized Person's</u> <u>Certificates (§1915.15(d))</u>

<u>Description of the requirement</u>. If a competent person finds that the atmospheric conditions in a certified space fail to meet the applicable requirements of the subpart, employers

must stop work in the space until a Marine Chemist or Coast Guard authorized person retests the space and issues a new certificate.

<u>Use and purpose of the requirement</u>. The discussion under §1915.14(a) above describes the use and purpose of the certificates required by this provision.

## <u>Tests to Maintain a Competent Person's Findings (§1915.15(e)); and Changes in the Conditions</u> <u>Determined by a Competent Person's Findings (§1915.15(f))</u>

<u>Description of the requirements</u>. Paragraph (e) specifies that after a competent person conducts the required initial visual inspection and tests and determines that a space is safe for worker entry, employers must ensure that the required atmospheric conditions are being maintained by having a competent person continue to test and visually inspect the space as often as necessary. Paragraph (f) specifies that if the atmospheric conditions do not meet the requirements of the subpart, employers must stop work in the space until conditions in the space are brought into compliance.

<u>Use and purpose of the requirements</u>. See the discussions of §§1915.12, 1915.13, and 1915.14 above for a description of the use and purpose of the paperwork requirements. In addition, the records of periodic inspections and testing allow employers to determine whether testing is being done at appropriate intervals and whether more frequent testing may be necessary.

#### Warning Signs and Labels (§1915.16)

This paragraph establishes protocols for preparing signs and labels required in this subpart. It does not impose burden hours.

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 collection techniques, or other forms of information technology (e.g., electronic submission of responses), when establishing and maintaining the required records. The Agency wrote the paperwork requirements of subparts A and B in performance-oriented language (i.e., in terms of <u>what</u> data to collect, not <u>how</u> 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 worker involved, and no other source or agency duplicates these requirements or can make the required information available to OSHA (i.e., the required information is available only from employers).

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

The information collection requirements of subparts A and B 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 subparts A and B are the minimum frequencies necessary to effectively monitor the exposure and health status of shipyard workers who work in confined and enclosed spaces and other dangerous atmospheres, and, thereby, fulfill its mandate "to assure so far as possible every working man and woman in the Nation safe and healthful working conditions and to preserve our human resources" as specified by the OSH Act (29 U.S.C. 651). Accordingly, if employers do not perform the required information collections, or delay in providing this information, shipyard workers will have an increased probability of entering spaces containing hazardous atmospheres, resulting in illness, injury, and death.

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

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

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

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

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

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

As required by the Paperwork Reduction Act of 1995 (44 U.S.C. 506(c)(2)(A)), OSHA published a notice in the Federal Register on October 16, 2017 (82 FR 48121), soliciting comments on its proposal to extend the Office of Management Budget's (OMB) approval of the information collection requirements specified in the standard on Subpart A ("General Provisions") and Subpart B (Confined and Enclosed Spaces and other Dangerous Atmospheres in Shipyard Employment") (29 CFR part 1915) under docket number OSHA-2011-0034. This notice is part of a preclearance consultation program that provides the general public and government agencies with an opportunity to comment. The Agency did not receive any comments in response to this notice.

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

The Agency will <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.

OSHA offers no assurance of confidentiality to respondents for this information collection.

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 subparts A and B require sensitive information.

12. Provide estimates of the hour burden of the collection of information. The statement should:

 Show 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 burdens, and explain the reasons for the variance. General 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 burdens estimates for each form and aggregate the hour burden.
- Provide estimates of annualized cost to respondents for the hour burdens for collections of information, identifying and using appropriate wage rate categories. The cost of contracting out or paying outside parties for information collection activities should not be included here. Instead, this cost should be included in Item 14.

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

The General Working Conditions in Shipyard final rule was published on May 2, 2011 (76 FR 24576). The number of affected firms for this ICR is based on the final rule's Final Economic Analysis, see Table 3 *Affected Establishments and Employees*). OSHA updated the industrial profiles by using the 2015 County Business Patterns Data from the US Census Bureau. OSHA estimates that there are 4,871 affected establishments in the shipyard industry employing 47,981 affected ("production") workers.

In addition, the Agency used the following wage rates<sup>8</sup> in making the cost determinations for this ICR using the June 2017 fringe benefits 30.4 % for private industry,<sup>9</sup> Employer Costs for Employee Compensation released September 8, 2017:

- Supervisory Production Worker (47-1011)
- · Competent Person (Marine Chemist) (19-2031)

\$47.00(32.71 before fringe) \$55.83(38.86 before fringe) \$24.97(17.38 before fringe)

• Secretary (43-6014)

The following sections summarize the burden hour and cost determinations for the information collection requirements specified by subparts A and B.

## **GENERAL PROVISIONS (SUBPART A)**

**Competent Person (§1915.7)** 

<sup>8</sup>Source: *May 2016 National Occupational Employment and Wage Estimates Employer Costs*, U.S. Department of Labor, Bureau of Labor Statistics, Occupational Employment Statistics. Wage rates include fringe benefits of 31.2 percent. http://www.bls.gov/oes/2016/may/oes\_nat.htm

<sup>9</sup> Source: Employer Cost for Employee Compensation, https://www.bls.gov/news.release/pdf/ecec.pdf

## Designation (§1915.7(b)); and Recordkeeping (§1915.7(d))<sup>10</sup>

The Agency estimates that a supervisory production worker spends 10 minutes (.17 hour) per year updating, maintaining, and posting<sup>11</sup> either the required roster or statement at each affected establishment. The estimated annual total burden hours and cost resulting from this paperwork requirement are:

**Burden Hours**: 4,871 establishments x 1 roster/statement per year x .17 hour = 828 hours **Cost**: 828 hours x \$47.00 = \$38,916

## CONFINED AND ENCLOSED SPACES AND OTHER DANGEROUS ATMOSPHERES IN SHIPYARD EMPLOYMENT (SUBPART B)

## (A) Precautions and the Order of Testing Before Entering Confined and Enclosed Spaces and Other Dangerous Atmospheres (§1915.12)

Oxygen Content (§§1915.12(a)(1) and (a)(2)); Flammable Atmospheres (§§1915.12(b)(1) and (b)(2)); and Toxic, Corrosive, Irritant or Fumigated Atmospheres and Residues (§§1915.12(c)(1), (c)(2), and (c)(3))

OSHA assumes that, on average, each of the 282 shipyards (this excludes offsite establishments) conducts 10 visual inspections and testing protocols per day under these provisions. The estimate includes initial inspection and testing, periodic retesting to maintain safe conditions, and retesting because a space has been found to be unsafe. For the 282 shipyards, this totals 702,180 protocols (10 protocols x 249 days x 282 affected shipyards = 702,180).

For the industries such as commercial fishing, fish processing and the offsite shipyards, the Agency estimates 2 protocols x 249 days x 4,589 = 2,285,322. The total number of protocols for the 4,871 affected establishments equals 2,987,502 (702,180 +2,285,322). Because the inspections and testing are performed by trained and experienced competent persons who are familiar with the workplace and procedures, the Agency estimates that a competent person takes 10 minutes (.17 hour) to complete each protocol (i.e., to inspect and test a space), label the space as necessary,<sup>12</sup> and generate, post, file, and disclose the protocol record according to §1915.7(d). Therefore, the total annual burden hours and cost of these provisions are:

**Burden Hours**: 2,987,502 protocols x .17 hour = 507,875 hours

**<sup>10</sup>**OSHA provides the estimated burden hours and cost for §1915.7(d) under the inspection and testing requirements of subpart B.

**<sup>11</sup>**Posting is the most cost-effective method of making the information available to the parties designated under §1915.7(b)(2)(ii).

**<sup>12</sup>**The Agency is taking no burden for developing these labels because OSHA provides the information that must be on the labels. (See "Controlling Paperwork Burden on the Public," 5 CFR 1320.3(c)(2))

**Cost**: 507,875 hours x \$55.83 = \$28,354,661

# Training Certification Records of Employees Entering Confined and Enclosed Spaces or Other Dangerous Atmospheres (§1915.12(d))

Employers must maintain training certification records and make them available for review by, NIOSH, and workers and their representatives. The Agency estimates that 10% (47,981 x 10% =4,798) of the covered workers or their representatives request access to the training certification records annually. Based on Bureau of Labor Statistic data,<sup>13</sup> it is estimated that there was a 3.6 percent turnover rate; thus, the Agency is using this rate to replace workers who may leave and require initial training (47,981 x 3.6% = 1,727). In addition, based on staff expertise, the Agency does not believe many workers would need training resulting from changes in operations duties. OSHA assumes 1% of covered workers require new assignment training annually (47,981 x 1% = 480). The Agency estimates that a supervisor takes two minutes (.03 hour) to disclose the certification records for new hires and those workers requiring new assignment training, which the Agency estimates will take a supervisor 2 minutes (.03 hour). Further, the Agency estimates that a secretary takes one minute (.02 hour) to maintain the training certification records for each covered worker, new hire, and those requiring new assignment training. Accordingly, the estimated total yearly burden hours and cost associated with this availability requirement are:

**Burden Hours**: 4,798 worker-related requests x .03 hour to disclose = 144 **Cost**: 144 hours x \$47.00 = \$6,768

**Burden Hours**: (1,727 + 480) = 2,207 new certifications x .03 hour to generate = 66 **Cost**: 66 hours x \$47.00 = 3,102

| <b>Burden Hours</b> : | 47,981 existing certifications + 480 new certifications = |
|-----------------------|---|
|                       | 48,461 certifications                                     |
|                       | 48,461 certifications x .02 hour to maintain = 969        |
| Cost:                 | 969 hours x \$24.97= \$24,196                             |

Rescue Teams (§1915.12(e))

OSHA believes that employers, as a usual and customary practice, establish rescue teams or arrange for an outside rescue team. Such usual and customary activities include employers knowing which workers have current certification in basic first aid as required by paragraph (e)

<sup>13</sup> *Job Openings and Labor Turnover, July 2017*, Bureau of Labor Statistics, U.S. Department of Labor, Washington, DC, released September 12, 2017. https://www.bls.gov/news.release/pdf/jolts.pdf The total separation rate from July 2014 to July 2017 is 3.6 percent.

(2). Employers are aware of current certification through usual and customary periodic discussions with workers concerning their job responsibilities. Under PRA-95, the term "burden" exempts usual and customary activities from the definition; therefore, there are 0 burden hours for this provision.

## Exchanging Hazard Information Between Employers (§1915.12(f))

The Agency considers it a usual and customary practice for employers who have workers working in a space covered by this paragraph to inform other employers whose workers may enter the same space about the hazards, safety rules, and emergency procedures concerning those spaces and atmospheres. Therefore, OSHA is not taking burden hours or cost for this paperwork requirement.

## (B) Cleaning and Other Cold Work (§1915.13)

# Testing Requirements for Cleaning and Cold Work Spaces and Ventilation Discharge Areas (§§1915.13(b)(2), (b)(4) and (b)(7))

These provisions duplicate the requirements of §§1915.12(b)(1) and (b)(2); see "Oxygen Content, Flammable Atmospheres, and Toxic, Corrosive, Irritant or Fumigated Atmospheres and Residues (§§1915.12(a)(1), (a)(2), (b)(1), (b)(2), (c)(1), (c)(2), and (c)(3)" above for the estimated burden hours and cost associated with these requirements.

## Requirements for Performing Cleaning and Cold Work (§1915.13(b)(10))

Based on staff expertise, OSHA estimates that employers will post the required signs during 5 percent of the 2,987,502 protocols (149,375) conducted annually and that a competent person spends 10 minutes (.17 hour) in determining concentrations of flammable, combustible, toxic, corrosive or irritant vapors and to post a sign at each of the designated locations. Thus, the total annual burden hours and cost estimated for this posting requirement are:

**Burden hours**: 149,375 spaces x .17 hour = 25,394 hours **Cost**: 25,394 hours x \$55.83 = 1,417,747

## (C) Hot Work (§1915.14)

# Hot Work Requiring Testing by a Marine Chemist or Coast Guard Authorized Person (§§1915.14(a)(1) and (a)(2))

For over 30 years, the shipyard industry has been complying with National Fire Protection Association Standard 306 ("Standard for the Control of Gas Hazards on Vessels"), which contains hot-work testing and certification requirements at least as burdensome as paragraphs 1915.14(a)(1) and (a)(2) of subpart B. Accordingly, OSHA believes that it is a usual and customary practice among employers in the shipyard industry to have a Marine Chemist or a

U.S. Coast Guard authorized person test and certify the specified work areas as safe for hot work, post the certificates in the immediate vicinity of the hot-work operation while the operation is in progress, and then file the certificates for at least three months. Therefore, the Agency is taking no burden hours or costs for these provisions.

## Hot Work Requiring Testing by a Competent Person (§§1915.14(b)(1) and (b)(2))

These provisions duplicate the requirements of §§1915.12(b)(1) and (b)(2); see "Oxygen Content, Flammable Atmospheres, and Toxic, Corrosive, Irritant or Fumigated Atmospheres and Residues (§§1915.12(a)(1), (a)(2), (b)(1), (b)(2), (c)(1), (c)(2), and (c)(3))" above for the estimated burden hours and cost associated with these requirements.

## (D) Maintenance of Safe Conditions (§1915.15)

Alteration of Existing Conditions (§1915.15(b)); Tests to Maintain the Conditions of a Marine Chemist's or Coast Guard Authorized Person's Certificates (§1915.15(c)); Change in the Conditions of a Marine Chemist's or Coast Guard Authorized Person's Certificates (§1915.15(d)); Tests to Maintain a Competent Person's Findings (§1915.15(e)); and Changes in the Conditions Determined by a Competent Person's Findings (§1915.15(f))

These provisions require employers, under specific conditions, to have a competent person reinspect and retest spaces according to the requirements of §§1915.12, 1915.13, and 1915.14. OSHA estimates that employers must repeat about 10 percent (298,750) of the 2,987,502 protocols conducted annually, and that it takes a competent person 10 minutes (.17 hour) to repeat each protocol. Therefore, the estimated total yearly burden hours and cost associated with these requirements are:

Burden hours: 298,750 protocols x .17 hour = 50,788 hours Cost: 50,788 hours x \$55.83 = \$2,835,494

## (E) Warning Signs and Labels (§1915.16)

This paragraph establishes protocols for preparing signs and labels required in previous paragraphs. It does not impose burden hours.

| Collection of Information   | Respondents | Frequency<br>per<br>Respondent | Response  | Time per<br>Response | Burden<br>Hours | Wage Rate<br>per Response | Cost         |
|---|-------------|--------------------------------|-----------|----------------------|-----------------|---------------------------|--------------|
| (SUBPART A)   |             |                                |           |                      |                 |                           |              |
| Competent Person (§1915.7)  | 4,871       | 1                              | 4,871     | 10/60 hours          | 828             | \$47.00                   | \$38,916     |
| Designation (§1915.7(b)); and Recordkeeping   |             |                                |           |                      |                 |                           |              |
| (SUBPART B)   |             |                                |           |                      |                 |                           |              |
| <ul> <li>(A) Precautions and the Order of<br/>Testing Before Entering Confined<br/>and Enclosed Spaces and Other<br/>Dangerous Atmospheres (§<br/>1915.12)</li> <li>Oxygen Content (§ 1915.12(a)(1)<br/>and (a)(2)); Flammable<br/>Atmospheres (§ 1915.12(b)(1)<br/>and (b)(2)); and Toxic, Corrosive,<br/>Irritant or Fumigated</li> </ul> | 4,871       | 613.32416                      | 2,987,502 | 10/60 hours          | 507,875         | \$55.83                   | \$28,354,661 |
| Atmospheres and Residues (§<br>1915.12(c)(1), (c)(2), and (c)(3))   |             |                                |           |                      |                 |                           |              |
| Certification Record of Training  | 4,871       | 0.985013                       | 4,798     | 2/60 hours           | 144             | \$47.00                   | 6,768        |
| for Employees Entering Confined   | 4,871       | 0.453089                       | 2,207     | 2/60 hours           | 66              | \$47.00                   | \$3,102      |
| and Enclosed Spaces or Other<br>Dangerous Atmospheres<br>(§1915.12(d))  | 4,871       | 9.94888                        | 48,461    | 1/60 hours           | 969             | \$24.97                   | \$24,196     |
| Rescue Teams (§1915.12(e))  | 4,871       | 0                              | 0         | 0                    | 0               | 0                         | 0            |
| Exchanging Hazard Information   | 4,871       | 0                              | 0         | 0                    | 0               | 0                         | 0            |

## Table 1: Summary of Burden Hours and Costs per Response

| Collection of Information  | Respondents | Frequency<br>per<br>Respondent | Response | Time per<br>Response | Burden<br>Hours | Wage Rate<br>per Response | Cost        |
|--|-------------|--------------------------------|----------|----------------------|-----------------|---------------------------|-------------|
| Between Employers (§1915.12(f))  |             |                                |          |                      |                 |                           |             |
| (B) Cleaning and Other Cold<br>Work (§1915.13)   |             |                                |          |                      |                 |                           |             |
| Testing Requirements for<br>Cleaning and Cold Work Spaces<br>and Ventilation Discharge Areas<br>(§§1915.13(b)(2), (b)(4) and (b)<br>(7)) | 4,871       | 0                              | 0        | 0                    | 0               | 0                         | 0           |
| Requirements for Performing<br>Cleaning and Cold Work<br>(§1915.13(b)(10))   | 4,871       | 30.666187                      | 149,375  | 10/60 hours          | 25,394          | \$55.83                   | \$1,417,747 |
| Hot Work Requiring Testing by a<br>Competent Person (§§1915.14(b)<br>(1) and (b)(2))   | 4,871       | 0                              | 0        | 0                    | 0               | 0                         | 0           |
| (D) Maintenance of Safe<br>Conditions (§1915.15)   | 4,871       | 61.33237                       | 298,750  | 10/60 hours          | 50,788          | \$55.83                   | \$2,835,494 |
| Alteration of Existing Conditions (§1915.15(b));   |             |                                |          |                      |                 |                           |             |
| Tests to Maintain the Conditions<br>of a Marine Chemist's or Coast<br>Guard Authorized Person's<br>Certificates<br>(§1915.15(c));        |             |                                |          |                      |                 |                           |             |
| Change in the Conditions of a<br>Marine Chemist's or Coast Guard   |             |                                |          |                      |                 |                           |             |

| Collection of Information   | Respondents | Frequency<br>per<br>Respondent | Response  | Time per<br>Response | Burden<br>Hours | Wage Rate<br>per Response | Cost         |
|---|-------------|--------------------------------|-----------|----------------------|-----------------|---------------------------|--------------|
| Authorized Person's Certificates<br>(§1915.15(d)); Tests to Maintain a<br>Competent Person's Findings<br>(§1915.15(e)); and |             |                                |           |                      |                 |                           |              |
| Changes in the Conditions<br>Determined by a Competent<br>Person's Findings<br>(§1915.15(f))                                |             |                                |           |                      |                 |                           |              |
| (E) Warning Signs and Labels<br>(§1915.16)  | 4,871       | 0                              | 0         | 0                    | 0               | 0                         | 0            |
| Totals  |             |                                | 3,495,964 |                      | 586,064         |                           | \$32,680,884 |

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

The cost determinations made under Item 12 account for the total annual cost burden to respondents or recordkeepers resulting from these collection of information requirements.

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

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

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

OSHA is requesting an adjustment increase of 247,083 burden hours (from 338,981 to 586,064 burden hours). The adjustment increase results from including additional industries covered by the Standard, an increase in the number of establishments and, a determination that not all affected industries would conduct 10 visual examinations/protocols every calendar day.

| Information Collection<br>Requirement   | Current<br>Burden<br>Hours | Requested<br>Burden<br>Hours | Adjustment | Explanation of<br>Adjustment  |
|---|----------------------------|------------------------------|------------|---|
| (SUBPART A)<br>Competent Person (§1915.7)<br>Designation (§1915.7(b)); and<br>Recordkeeping   | 469                        | 828                          | 359        | The adjustment is<br>due to the increase<br>in the number of<br>affected<br>establishments. |
| (SUBPART B)<br>(A) Precautions and the Order of<br>Testing Before Entering Confined<br>and Enclosed Spaces and Other<br>Dangerous Atmospheres (§ 1915.12)<br>Oxygen Content (§ 1915.12(a)(1) and<br>(a)(2)); Flammable Atmospheres (§<br>1915.12(b)(1) and (b)(2)); and Toxic,<br>Corrosive, Irritant or Fumigated<br>Atmospheres and Residues (§ | 292,162                    | 507,875                      | 215,713    | The adjustment is<br>due to the increase<br>in the number of<br>affected<br>establishments. |

## Table 2: Summary of Burden Hours and Costs Requested

| Information Collection<br>Requirement   | Current<br>Burden<br>Hours | Requested<br>Burden<br>Hours | Adjustment | Explanation of<br>Adjustment   |
|---|----------------------------|------------------------------|------------|--|
| 1915.12(c)(1), (c)(2), and (c)(3))  |                            |                              |            |  |
| Certification Record of Training for<br>Employees Entering Confined and<br>Enclosed Spaces or Other Dangerous<br>Atmospheres (§1915.12(d))  | 310                        | 144                          | -166       | The adjustment<br>decrease is due to<br>the number of<br>affected workers  |
|   | 130                        | 66                           | -64        | going from 103,286<br>to 47,981.   |
|   | 2,086                      | 969                          | -1,117     | The job opening and<br>labor turnover<br>increased from 3.2%<br>to 3.6%.   |
| Rescue Teams (§1915.12(e))  | 0                          |                              | 0          | No change.   |
| Exchanging Hazard Information<br>Between Employers (§1915.12(f))  | 0                          |                              | 0          | No change.   |
| <ul> <li>(B) Cleaning and Other Cold Work<br/>(§1915.13)</li> <li>Testing Requirements for Cleaning<br/>and Cold Work Spaces and Ventilation<br/>Discharge Areas (§§1915.13(b)(2), (b)<br/>(4) and (b)(7))</li> </ul> | 0                          |                              | 0          | No change.   |
| Requirements for Performing Cleaning<br>and Cold Work (§1915.13(b)(10))   | 14,608                     | 25,394                       | 10,786     | The adjustment is<br>due to the increase<br>in the number of<br>affected<br>establishments<br>captured for this<br>ICR |
| Hot Work Requiring Testing by a<br>Competent Person (§§1915.14(b)(1)<br>and (b)(2))   | 0                          |                              | 0          | No change.   |
| (D) Maintenance of Safe Conditions<br>(§1915.15)  |                            |                              |            |  |
| Alteration of Existing Conditions<br>(§1915.15(b));<br>Tests to Maintain the Conditions of a  | 29,216                     | 50,788                       | 21,572     | The adjustment is<br>due to the increase<br>in the number of<br>affected   |
|   |                            | 22                           |            | establishments   |

| Information Collection<br>Requirement  | Current<br>Burden<br>Hours | Requested<br>Burden<br>Hours | Adjustment | Explanation of<br>Adjustment |
|--|----------------------------|------------------------------|------------|------------------------------|
| Marine Chemist's or Coast Guard<br>Authorized Person's Certificates<br>(§1915.15(c));  |                            |                              |            |                              |
| Change in the Conditions of a Marine<br>Chemist's or Coast Guard Authorized<br>Person's Certificates (§1915.15(d));<br>Tests to Maintain a Competent<br>Person's Findings (§1915.15(e)); and |                            |                              |            | captured for this<br>ICR     |
| Changes in the Conditions Determined<br>by a Competent Person's Findings<br>(§1915.15(f))  |                            |                              |            |                              |
| (E) Warning Signs and Labels<br>(§1915.16)   | 0                          | 0                            | 0          | No change.                   |
| TOTALS   | 338,981                    | 586,064                      | 247,083    |                              |

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

OSHA will not publish the information collected under subparts A and B.

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 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 requesting an exception to the certification statement.

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

There are no collections of information employing statistical methods.

| Industry        | Industry                    | Size Class | Affected       | Affected  |
|-----------------|-----------------------------|------------|----------------|-----------|
| Code            | Name                        |            | Establishments | Employees |
| NAICS<br>336611 | Shipyard                    | 500 & Up   | 26             | 15,611    |
|                 |                             | 100-499    | 86             | 3,770     |
|                 |                             | 20-99      | 170            | 1,687     |
|                 |                             | 1-19*      | 392            | 432       |
|                 |                             |            |                |           |
| NAICS<br>11411  | Commercial<br>Fishing       | 100-499    | 12             | 420       |
|                 |                             | 20-99      | 31             | 235       |
|                 |                             | 1-19       | 2,300          | 526       |
|                 |                             |            |                |           |
| NAICS<br>311712 | Fish<br>Processing          | 500 & Up   | 9              | 1,264     |
|                 |                             | 100-499    | 67             | 2,807     |
|                 |                             | 20-99      | 181            | 1,711     |
|                 |                             | 1-19       | 361            | 358       |
|                 |                             |            |                |           |
| NAICS<br>488330 | Tug &<br>Towing<br>Services | 500 & Up   | 1              | 232       |
|                 |                             | 100-499    | 22             | 578       |
|                 |                             | 20-99      | 129            | 1,037     |
|                 |                             | 1-19       | 737            | 525       |
|                 |                             |            |                |           |

## Table 3 – Affected Establishments and Employees

| NAICS | Passenger | 100-499 | 9     | 169    |
|-------|-----------|---------|-------|--------|
|       | Vessels   |         |       |        |
|       |           | 20-99   | 43    | 361    |
|       |           | 1-19    | 295   | 238    |
|       |           |         |       |        |
|       |           | Total   | 4,871 | 47,981 |

Note: this data is from using the 2015 NAICS codes.