SUPPORTING STATEMENT FOR THE INFORMATION COLLECTION REQUIREMENTS IN THE HEXAVALENT CHROMIUM STANDARDS FOR GENERAL INDUSTRY (29 CFR 1910.1026), SHIPYARD EMPLOYMENT (29 CFR 1915.1026), AND CONSTRUCTION (29 CFR 1926.1126)[1] OMB CONTROL NO. 1218-0252 (April 2016)

A. JUSTIFICATION

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

The main objective of the Occupational Safety and Health Act ("OSH Act" or "Act") is to "assure so far as possible every working man and woman in the Nation safe and healthful working conditions and to preserve our human resources" (29 U.S.C. 651). To achieve this objective, the OSH Act specifically authorizes "the development and promulgation of occupational safety and health standards" (29 U.S.C. 651). The Act states further that "[t]he Secretary . . . shall prescribe such rules and regulations as [he/she] may deem necessary to carry out [his/her] responsibilities under this Act, including rules and regulations dealing with the inspection of an employer's establishment" (29 U.S.C. 651).

To protect worker health, the OSH Act authorizes the Occupational Safety and Health Administration ("OSHA" or "the Agency") to develop standards that provide for "monitoring or measuring employee exposure" to occupational hazards and "prescribe the type and frequency of medical examinations and other tests which shall be made available [by the employer] to employees exposed to such hazards . . . to most effectively determine whether the health of such employees is adversely affected by such exposure" (29 U.S.C. 655) and to take action to control the risks due to exposure. Moreover, the Act directs the Agency to "issue regulations requiring employers to maintain accurate records of employee exposures to potentially toxic materials or other harmful physical agents which are required to be monitored and measured," and further specifies that such regulations provide "for each employee or former employee to have access to such records as will indicate [their] own exposure to toxic materials or harmful physical agents" (29 U.S.C. 657). In addition, the OSH Act mandates that "[e]ach employer shall make, keep and preserve, and make available to the Secretary [of Labor] . . . . such records regarding [his/her] activities relating to this Act as the Secretary . . . may prescribe by regulation as necessary or appropriate for the enforcement of this Act or for developing information regarding the causes and prevention of occupational accidents and illnesses" (29 U.S.C. 657).

Section 6(b)(7) of the Act specifies that "[a]ny standard promulgated under this subsection shall prescribe the use of labels or other appropriate forms of warning as are necessary to insure that

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

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." This provision goes on to state that "[t]he Secretary, in consultation with the Secretary of Health and Human Services, may by rule promulgated pursuant to section 553 of title 5, United States Code, make appropriate modifications in the foregoing requirements relating to the use of labels or other forms of warning . . . as may be warranted by experience, information, or medical or technological developments acquired subsequent to the promulgation of the relevant standard" (29 U.S.C. 655).

Under the authority granted by the OSH Act, on February 28, 2006, the Agency issued separate standards addressing hexavalent chromium ("Cr(VI)") exposure in general industry, shipyard employment, and construction; these standards are 29 CFR 1910.1026, 1915.1026, and 1926.1126, respectively. The standard for shipyard employment also applies to marine terminals and longshoring. The standards for construction and shipyard employment are similar to each other, but differ in some respects from the standard for general industry. OSHA believes that certain conditions in these two sectors warrant requirements that are somewhat different than those requirements that apply to general industry.

The basis for these standards is a determination by OSHA that exposure to Cr(VI) poses significant risk of lung cancer, nasal septum ulcerations and perforations, dermatoses, and asthma to workers. OSHA established a permissible exposure limit (PEL) for occupational exposure to Cr(VI) of 5 microgram per cubic meter of air (5 $\mu g/m^3$), assessed using an 8-hour time-weighted average (referred to hereafter as "TWA"). The Agency also developed an action level (AL) of 2.5 microgram per cubic meter of air (2.5 $\mu g/m^3$), measured as a TWA. Exposures below the action level (AL) exempt employers from some of the regulatory burdens of the standards, such as worker exposure monitoring and medical surveillance. Items 2 and 12 below list and describe the specific information collection requirements of the standards.

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.

A. Exposure Determination (paragraph (d) of §§ 1910.1026, 1915.1026, and 1926.1126)

Paragraph (d) of the standard requires each employer who has a workplace or work operation covered by these standards to determine the 8-hour time-weighted average (TWA) exposures for each worker exposed to Cr(VI). The purpose of requiring an assessment of worker exposures to Cr(VI) includes: determination of the extent and degree of Cr(VI) exposure at the worksite; identification and prevention of worker Cr(VI) overexposure; identification of the sources of exposure to Cr(VI); collection of exposure data so that the employer can select the proper control methods; and evaluation of the effectiveness of these control methods. Assessment enables employers to meet their legal obligation to ensure that their workers are not exposed to Cr(VI) in excess of the PEL, and to notify workers of their exposure levels as required by Section 8(c)(3) of the Act. In addition, the exposure data provides information to the physician or other licensed

health care professional (PLHCP)[2] who is performing the medical examinations to use in making an accurate diagnosis of presenting conditions.

Paragraph (d)(2) of the standards, titled "Scheduled Monitoring Option," specifies the air-monitoring requirements for Cr(VI) exposures. Employers must perform initial, semi-annual, and quarterly air monitoring, respectively, under paragraphs (d)(2)(i), (d)(2)(iii), and (d)(2)(iv) of the standards, depending on the level of Cr(VI) exposure. The AL and PEL are benchmarks to the monitoring frequency. The other provisions of paragraph (d) address the requirements for additional monitoring, and performance-oriented options.

Additional monitoring, required under paragraph (d)(2)(vi) of the standards, is necessary to ensure that changes in working conditions have not increased worker exposure to Cr(VI). This information will enable the employer to take appropriate action to protect exposed workers, such as instituting additional engineering controls or providing appropriate respiratory protection.

Paragraph (d)(3) ("Performance-oriented option") is an exposure monitoring option that employers may use instead of the scheduled-monitoring options specified by paragraph (d)(2). It requires the employer to determine the 8-hour TWA exposure for each worker on the basis of any combination of air-monitoring data, historical monitoring data, or objective data sufficient to accurately characterize worker exposure to Cr(VI). This option allows employers flexibility in assessing the Cr(VI) exposures of their workers. When the employer elects to follow this option, the exposure determination must provide the same degree of assurance that worker exposures have been correctly characterized as the scheduled-monitoring option would, and the employer must also reevaluate worker exposures when any change occurs in the production process, raw materials, equipment, personnel, work practices, or control methods that may result in new or additional exposures to Cr(VI).

"Historical monitoring data" means data from Cr(VI) monitoring conducted prior to May 30, 2006, and obtained during work operations in which the processes, types of material, control methods, work practices, and environmental conditions closely resemble the employer's current workplace operations. "Objective data" means information, including air-monitoring data from industry-wide surveys or calculations, involving a substance that has the composition, or chemical and physical properties, of the Cr(VI)-related substance to which workers are exposed, and that is associated with a specific product, material, process, operation, or activity that is the basis of their exposure. Therefore, objective data must resemble closely the processes, types of material, control methods, work practices, and environmental conditions in the employer's current workplace operations; objective data also must represent Cr(VI) exposure levels across the range of work operations or products encountered by workers. Employers may use data collected by a trade association from its members to determine worker exposures to Cr(VI), provided the data meet the definition of objective data in the standards.

2A PLHCP is an individual whose legally permitted scope of practice (i.e., license, registration, or certification) allows him or her to independently provide or be delegated the responsibility to provide some or all of the particular health care services required by the standards.

1. Scheduled Monitoring Option: Initial Exposure Monitoring (paragraph (d)(2)(i) of §§ 1910.1026, 1915.1026, and 1926.1126)

Paragraph (d)(2)(i) of the final standards requires the employer to perform initial monitoring to determine the 8-hour TWA exposure for each worker by collecting a sufficient number of personal breathing-zone air samples to accurately characterize full-shift exposure for each job classification in each work area during each shift. When an employer does representative sampling instead of sampling all workers to meet this requirement, the employer must sample the worker(s) expected to have the highest Cr(VI) exposures.

If initial monitoring indicates that worker Cr(VI) exposures are below the AL, the employer may discontinue monitoring for those workers whose exposures are represented by the monitoring data. (See: Paragraph (d)(2)(ii).) However, if the initial monitoring indicates worker exposures are at or above the AL, the employer must perform periodic monitoring.

2. Scheduled Monitoring Option: Semi-Annual Exposure Monitoring (paragraph (d)(2)(iii) of §§ 1910.1026, 1915.1026, and 1926.1126)

Because of fluctuation in exposures, OSHA believes that when initial monitoring results equal or exceed the AL and are at or below the PEL, employers must continue to monitor workers at least every 6 months to ensure that exposures remain at or below the PEL. If the employer installs or upgrades controls, semi-annual monitoring will demonstrate whether the controls are working properly. Selection of appropriate respiratory protection also depends on adequate knowledge of worker exposures. The 6-month monitoring frequency will provide intervals that protect workers exposed to Cr(VI) at or above the AL and at or below the PEL, but are practical for employers to implement.

If periodic monitoring indicates that employee exposures are below the action level, and the result is confirmed by the result of another monitoring taken at least seven days later, the employer may discontinue the monitoring for those employees whose exposures are represented by such monitoring. (See paragraph (d)(2)(v).)

3. Scheduled Monitoring Option: Quarterly Exposure Monitoring (paragraph (d)(2)(iv) of §§ 1910.1026, 1915.1026, and 1926.1126)

When initial monitoring results exceed the PEL, periodic monitoring every three months allows the employer to maintain an accurate profile of worker exposures. If the employer installs or upgrades controls, quarterly monitoring will demonstrate whether the controls are working properly. Selection of appropriate respiratory protection also depends on adequate knowledge of worker exposures. The three-month monitoring frequency provides an interval that protects workers exposed to Cr(VI) above the PEL, but are practical for employers to implement.

If periodic monitoring indicates that employee exposures are below the action level, and the result is confirmed by the result of another monitoring taken at least seven days later, the

employer may discontinue the monitoring for those employees whose exposures are represented by such monitoring. (See paragraph (d)(2)(v).)

4. Employee Notification of Determination Results (paragraphs (d)(4) of §§ 1910.1026, 1915.1026, and 1926.1126)

Paragraph (d)(4) of the general industry standard requires the employer to notify each affected worker[3] within 15 working days after making an exposure determination. In the shipyard and construction industries employers are required to notify workers of exposure-determination results as soon as possible but not more than 5 working days after making an exposure-determination. The employer must either notify each affected worker in writing or by posting the monitoring results in an appropriate location accessible to all affected workers. In addition, whenever the PEL has been exceeded, the written notification must contain a description of the corrective action(s) that the employer will take to reduce the worker's exposure to or below the PEL. The purpose of this requirement is to inform workers of the corrective actions the employer is taking to reduce the exposure level to or below the PEL. It is necessary to assure workers that the employer is making efforts to furnish them with a safe and healthful work environment, and is required under section 8(c)(3) of the Act.

B. Regulated Areas (§ 1910.1026(e))

1. Demarcation (§1910.1026(e)(2))

Paragraph (e)(1) of the general industry standard[4] requires the employer to establish regulated areas wherever a worker's exposure to airborne concentrations of Cr(VI) is, or can reasonably be expected to be, in excess of the PEL. Under paragraph (e)(2), regulated areas must be demarcated from the rest of the workplace in a manner that adequately establishes and alerts workers to the boundaries of these areas. Employers must limit access to regulated areas to individuals: authorized by the employer and required by work duties to be present in the regulated area; entering the regulated area to observe monitoring procedures; or authorized by the OSH Act or OSHA regulations to be in a regulated area.

The purpose of a regulated area is to ensure that the employer makes workers aware of the presence of Cr(VI) at levels above the PEL, and to limit Cr(VI) exposure to as few workers as possible. The establishment of a regulated area is an effective means of limiting the risk of exposure to substances known to have serious physical effects.

OSHA is not taking burden hours or costs for this provision under Items 12 and 13 of this Supporting Statement because it is performance oriented and does not require employers to post

3Affected employees are employees having Cr(VI) exposures above the PEL, including employees whose exposures are estimated on the basis of representative sampling or from historical or objective data.

4OSHA does not require regulated areas in the construction and shipyard standards because worksite conditions, such as workplace variability, differ substantially between general industry employment and construction and shipyard employment.

warning signs. OSHA does not specify how employers are to demarcate regulated areas. Means of demarcation can include barricades, lines and textured flooring, or signs that notify workers of Cr(VI) exposure hazards, the need to restrict access to Cr(VI)-contaminated areas, and protective measures they must implement. Permitting employers to choose how best to identify and limit access to regulated areas is consistent with OSHA's belief that employers are in the best position to make such determinations, based on their knowledge of the specific conditions of their workplaces.

C. Respiratory Protection (§§1910.1026(g), 1915.1026(f), and 1926.1126(f))

Paragraph (g)(1) of the general industry standard, and paragraph (f)(1) of the shipyard-employment and construction standards, establish the final rule's requirements for use of respiratory protection. Employers are required to provide each worker with respiratory protection when engineering controls and work practices cannot reduce worker exposure to Cr(VI) to or below the PEL. Specifically, respirators are required during the installation and implementation of feasible engineering and work-practice controls; during work operations for which engineering and work practice controls are not feasible; when all feasible engineering and work practice controls have been implemented, but are not sufficient to reduce exposure to or below the PEL; during work operations when workers are exposed above the PEL for fewer than 30 days per year, and the employer has elected not to implement engineering and work-practice controls to achieve the PEL; and during emergencies.

Whenever respirators are used to comply with the requirements of the standards, paragraph (g)(2) of the general industry standard, and paragraph (f)(2) of the shipyard-employment and construction standards, require the employer to implement a comprehensive, written respiratory-protection program in accordance with the Agency's Respiratory Protection Standard (29 CFR 1910.134), which covers each worker required to use a respirator.[5] The respiratory-protection program is designed to ensure that respirators are properly used in the workplace, and are effective in protecting workers. The program must include procedures for selecting respirators for use in the workplace; medical evaluation of workers required to use respirators; fit-testing workers for respirator use; procedures for proper use of respirators in routine and reasonably foreseeable emergency situations; procedures and schedules for maintaining respirators; procedures to ensure adequate quality, quantity, and flow of breathing air for atmosphere-supplying respirators; training of workers in the proper use of respirators; and procedures for evaluating the effectiveness of the program. The purpose of these requirements is to ensure that employers establish a standardized procedure for selecting, using, and maintaining respirators for each workplace that requires respirator use. Developing written procedures ensures that employers implement the required respirator program in an effective and reliable manner that addresses the unique characteristics (including chemical hazards) of the workplace. This

5 The Agency accounts for the burden hours and costs of developing a written respiratory protection program in the Information Collection Request (ICR) for the Respiratory Protection Standard, OMB Control No. 1218-0099.

provision also serves as a reminder to employers covered by the Cr(VI) rule that they must comply with the Respiratory Protection Standard when respirators are provided to workers.

The four principle paperwork requirements specified in the respiratory-protection program are qualitative and quantitative fit testing to ensure that respirators adequately protect workers who must use them, administration of the medical questionnaire to determine the physical and psychological ability of workers to use the respirator selected for them, and the follow-up medical examination to further evaluate responses to the medical questionnaire that may indicate conditions that would prohibit a worker from using the selected respirator. The following paragraphs discuss in detail the collection of information costs associated with these respiratory-protection program requirements.

1. Respiratory Protection Program (§§ 1910.1026(g)(2), 1915.1026(f)(2), and 1926.1126(f)(2)): Qualitative Fit Testing for Respirator Use

In accordance with the Respiratory Protection Standard, 29 CFR 1910.134, workers who use respirators for protection against airborne Cr(VI) must receive either a qualitative fit test (QLFT) or a quantitative fit test (QNFT) prior to initial respirator use, and at least annually thereafter. The QLFT involves the introduction of a gas, vapor, or aerosol test agent into an area around the head of the respirator user. If the respirator user can detect the presence of the test agent through subjective means, such as odor, taste, or irritation, the respirator fit is inadequate. The QLFT record must include the date and type of fit test performed (e.g., irritant smoke, saccharin), worker information, and type of respirator. Employers must maintain the fit-testing records until the next fit test is administered. Both employers and OSHA need these records to determine that: each worker received a fit test, both prior to starting respirator use and at least annually thereafter; each worker passed the qualitative fit test; and the model and size of the respirator used during fit testing are the same as the model and size of the respirator used by the worker in the workplace.

2. Respiratory Protection Program (§§ 1910.1026(g)(2), 1915.1026(f)(2), and 1926.1126(f)(2)): Quantitative Fit Testing for Respirator Use

In accordance with the Respiratory Protection Standard, 29 CFR 1910.134, in a quantitative respirator fit test (QNFT), the adequacy of respirator fit is assessed by measuring the amount of leakage into the respirator, either by generating a test aerosol as a test atmosphere, using ambient aerosol as the test agent, or using controlled negative pressure to measure the volumetric leak rate. Appropriate instrumentation is required to quantify respirator fit in QNFT. The QNFT record must include the date and type of fit test performed, worker information, type of respirator, and a record of the test (e.g., strip charts, computer integration). Employers must maintain the fit-testing records until the next fit test is administered. These records allow employers and OSHA to ensure that: each worker received a fit test, both prior to starting respirator use and at least annually thereafter; each worker achieved a sufficiently high fit factor to pass the QNFT for the required assigned protection factor; the QNFT was performed correctly, and the fit factor was calculated properly; and the model and size of the respirator used

during fit testing are the same as the model and size of the respirator used by the worker in the workplace.

3. Respiratory Protection Program (§§ 1910.1026(g)(2), 1915.1026(f)(2), and 1926.1126(f)(2)): Medical Questionnaires for Respirator Use

In accordance with the Respiratory Protection Standard, 29 CFR 1910.134, workers using a respirator for the first time for protection against airborne Cr(VI) must receive a medical evaluation prior to their initial respirator fit test and prior to being required to use the respirator in the workplace The medical evaluation must consist of either a medical questionnaire (provided in Appendix C of OSHA's Respiratory Protection Standard), or an initial medical examination, that obtains the same information as the questionnaire. The medical evaluation ensures that workers who use respirators can tolerate: the physiological burden associated with respirator use, including the burden imposed by the respirator itself (e.g., its weight and breathing resistance during both normal operation and under conditions of filter, canister, or cartridge overload); musculoskeletal stress; limitations on auditory, visual, and odor sensations; and physical and psychological isolation. For this ICR, the Agency is assuming that employers will administer only the medical questionnaire to obtain the required information.

4. Respiratory-Protection Program (§§ 1910.1026(g)(2), 1915.1026(f)(2), and 1926.1126(f)(2)): Follow-up Medical Examination for Respirator Use

If a worker responds positively to specific items on the questionnaire, the employer must provide the worker with a follow-up medical examination. Employers must use a PLHCP to conduct the medical examination (or questionnaire), and the PLHCP determines the content of the follow-up medical examination. The follow-up medical examination allows PLHCPs to obtain additional information that may be useful in arriving at a final medical recommendation regarding respirator use, including whether a response to the questionnaire is valid. Also, the follow-up questionnaire provides the PLHCP with an opportunity to investigate through medical examination any medical conditions related to respirator use that the questionnaire or other sources of information did not address.

D. Protective Work Clothing and Equipment (§§ 1910.1026(h), 1915.1026(g), and 1926.1126(g))

1. Removal and Storage (§§ 1910.1026(h)(2)(iv), 1915.1026(g)(2)(iv), and 1926.1126(g)(2)(iv))

Paragraph (h)(2)(iv) of the general industry standard, and paragraph (g)(2)(iv) in shipyard-employment and construction standards, require employers who remove bags or containers of contaminated protective clothing and equipment from change rooms for laundering, cleaning, and maintenance or disposal to label these bags and containers in accordance with the requirements of OSHA's Hazard Communication Standard ("HCS") (29 CFR 1910.1200).

Labels inform employers and workers who handle bags or containers contaminated by Cr(VI) of the identity of the substance, and provide appropriate hazard warnings. This paragraph directs the employer's attention to labeling requirements of the HCS. The reference to the HCS is included to remind employers of their obligation under that standard to label containers of hazardous chemicals such as Cr(VI). When employers and workers are aware of the presence of Cr(VI) and its potential hazards, appropriate measures can be implemented to protect workers.

In determining the burden and costs for labels, OSHA assumes that employers will obtain labels that meet the HCS requirements from a contractor.

2. Cleaning and Replacement (§§ 1910.1026(h)(3)(iii), 1915.1026(g)(3)(iii), and 1926.1126(g)(3)(iii))

These paragraphs require employers to inform any person who launders or cleans protective clothing or equipment contaminated with Cr(VI): of the potentially harmful effects of exposure to Cr(VI); and that the clothing and equipment should be laundered or cleaned in a manner that minimizes skin or eye contact with Cr(VI) and effectively prevents the release of airborne Cr(VI) in excess of the PEL.

As with the provision reminding employers of their obligation for labeling under the HCS, this requirement will ensure that persons who clean or launder Cr(VI)-contaminated items are aware of the associated hazards so they can take appropriate protective measures. When laundry or cleaning services are performed by third parties, the information provided about Cr(VI) need not be extensive to accomplish this goal. Appropriate hazard warnings, as required on labels by the HCS, will be sufficient to indicate the potentially harmful effects of exposure to Cr(VI).

OSHA believes that employers covered by these standards will contract with industrial laundry services to launder or clean Cr(VI)-contaminated protective clothing. The Agency also assumes that these services, which specialize in laundering and cleaning protective clothing contaminated with toxic chemicals, will be in compliance with HCS, label the bags and other containers used to store this clothing for subsequent removal by the service; [therefore, OSHA is not taking a burden to label these bags and containers in this Supporting Statement.] However, the Agency is taking burden hours and burden cost for a supervisor to inform a laundry service of the Cr(VI)-contaminated clothing and the need for the required labels.

E. Housekeeping (§ 1910.1026(j))

1. Disposal (§ 1910.1026(j)(3)(ii))

Paragraph (j)(3)(ii) of the general industry standard[6] requires employers to label bags or containers of waste, scrap, debris, and any other materials contaminated with Cr(VI) that are

6OSHA does not require housekeeping requirements for construction and shipyards. OSHA has determined that the housekeeping provisions in the general industry standard are not appropriate for these sectors because of the difficulties of complying with such requirements in construction and shipyard environments.

consigned for disposal in accordance with the HCS. The purpose of this provision is to inform individuals who handle these items of the potential hazards involved. OSHA believes that it is critically important that workers be made aware of the hazards associated with potential Cr(VI) exposures. By alerting employers and workers who are involved in disposing of Cr(VI)-contaminated material of the potential hazards of Cr(VI) exposure, they will be better able to implement protective measures. The Agency has determined that the information required on labels by the HCS, including the chemical identity and appropriate hazard warnings, is sufficient to make workers aware of potential Cr(VI) exposure hazards. Reference to the HCS has been added to ensure that employers are aware of their obligations under the HCS for labeling of containers containing Cr(VI) contaminated waste. OSHA is not taking burden for this labeling requirement because the Resource Conservation and Recovery Act of 1976, as amended (42 U.S.C. 6901 *et seq*.), specifies that employers must provide the required label on hazardous wastes, including Cr(VI), destined for disposal.

F. Medical Surveillance (§§ 1910.1026(k), 1915.1026(i), and 1926.1126(i))

Employers must make medical surveillance available at no cost to the worker, and at a reasonable time and place, for all workers who are or may be occupationally exposed to Cr(VI) at or above the action level for 30 or more days a year, experiencing signs or symptoms of the adverse health effects associated with Cr(VI) exposure, or exposed in an emergency. In addition, employers must provide medical examinations, and they must assure that all medical examinations and procedures required by the standards are performed by or under the supervision of a PLHCP.

The purpose of medical surveillance for Cr(VI) is to determine if a worker can be exposed to the Cr(VI) present in his or her workplace without experiencing adverse health effects, and to identify Cr(VI)-related adverse health effects so that appropriate intervention measures can be taken. With regard to periodic (i.e., annual) medical examinations, documentation and maintenance of the medical-examination results required by the standards provide a continuous record of worker health. PLHCPs use these records to determine the extent to which workers, since their last examination, experience health effects related to Cr(VI) exposure. Additionally, if signs and symptoms of potential Cr(VI) overexposure appear, the PLHCP often needs information about an worker's previous medical condition to make an accurate diagnosis of the presenting condition, ascertain its apparent cause, and identify a course of treatment. Medical records also permit workers to determine whether they need treatment, or to evaluate the effectiveness of their employer's exposure-reduction program.

The medical surveillance requirements of the standards are consistent with Section 6(b)(7) of the OSH Act, which requires that, when appropriate, medical surveillance programs be included in OSHA health standards to aid in determining whether the health of workers is adversely affected by exposure to toxic substances. The following paragraphs describe the specific medical examinations in detail.

1. Initial Medical Examination (§§ 1910.1026(k)(1)(i)(A), (k)(3)(i), and (k)(3)(ii); 1915.1026(i)(1)(i)(A), (i)(3)(i), and (i)(3)(ii); and 1926.1126(i)(1)(i)(A), (i)(3)(i), and (i)(3)(ii))

Under the medical surveillance requirements specified by §§ 1910.1026(k)(1)(i)(A), 1915.1026(i)(1)(i)(A), and 1926.1126(i)(1)(i)(A), employers must provide initial medical examinations to workers who are or may be occupationally exposed to Cr(VI) at or above the AL for 30 or more days a year. The content of the initial medical examinations is described by §§ 1910.1026(k)(3)(i) and (k)(3)(ii), 1915.1026(i)(3)(i) and (i)(3)(ii), and 1926.1126(i)(3)(i) and (i)(3)(ii)), and consists of: a medical and work history, with emphasis on past, present, and anticipated future exposure to Cr(VI); a history of respiratory system dysfunction; a history of asthma, dermatitis, skin ulceration, or nasal septum perforation; smoking status and history; and a physical examination of the skin and respiratory tract. The initial medical examination not only establishes a medical baseline for each worker, but serves to identify workers who have Cr(VI)-related medical disorders or other health problems that additional Cr(VI) exposure may exacerbate. For purposes of estimating these ICR burden hours and costs, the Agency assumes that: all initial monitoring is completed, existing employers will experience a 5% turnover of potentially exposed employees requiring initial medical examinations, and new employers will have no potentially exposed employees at or above the action level requiring an initial medical examination. Subsequent medical examinations for these employees are accounted for under the following item.

2. Annual Medical Examination (§§ 1910.1026(k)(2)(ii), (k)(3)(i), and (k)(3)(ii); 1915.1026(i)(2)(ii), (i)(3)(i), and (i)(3)(ii); and 1926.1126(i)(2)(ii), (i)(3)(i), and (i)(3)(ii))

Employers must begin to provide annual medical examinations to the workers who received the initial medical examinations. Employers must provide these annual medical examinations in the year after the initial medical examination is completed. The content of the annual medical examinations is identical to the content of the initial medical examinations. Periodic (i.e., annual) examinations provide information to employers and PLHCPs regarding the medical effects of extended Cr(VI) exposure, as well as the effectiveness of the employer's control equipment and procedures.

3. Initial Medical Examination with Additional Tests (§§ 1910.1026(k)(1)(i)(B), (k)(2)(iii), and (k)(3)(i)-(k)(3)(iii); 1915.1026(i)(1)(i)(B), (i)(2)(iii) and (i)(3)(i)-(i)(3)(iii); and 1926.1126(i)(1)(i)(B), (i)(2)(iii) and (i)(3)(i)-(i)(3)(iii))

These initial medical examinations apply to workers who are experiencing signs or symptoms of the adverse health effects associated with Cr(VI) exposure. The PLHCP is responsible for ordering these examinations, the content of which includes the medical and work history, and physical examination of the skin and respiratory tract, described above in item 1 of this section. However, these workers, because of the signs or symptoms they are experiencing, also receive additional testing ordered by the PLHCP under §§ 1910.1026(k)(2)(iii) and (k)(3)(iii), 1915.1026(i)(2)(iii) and (i)(3)(iii), and 1926.1126(i)(2)(iii) and (i)(3)(iii).

4. Annual Medical Examination and Additional Tests (§§ 1910.1026(k)(2)(ii), (k)(2)(iii) and (k)(3)(i)-(k)(3)(iii); 1915.1026(i)(2)(ii), (i)(2)(iii) and (i)(3)(i)-(i)(3)(iii); and 1926.1126(i)(2)(ii), (i)(2)(iii) and (i)(3)(i)-(i)(3)(ii))

Under these provisions, employers must provide these annual medical examinations and additional exams 30 days after the PLCP recommends them, which include additional testing, to the workers described in the previous item. Employers must provide these annual medical examinations in the year after the initial medical examination is completed or 30 days after a PLCHP recommends additional exams. The content of these annual medical examinations is identical to the content of the initial medical examinations with additional testing (see previous item).

5. Medical Examination After Initial Assignment (§§ 1910.1026(k)(2)(i), (k)(3)(i), and (k)(3)(ii); 1915.1026(i)(2)(i), (i)(3)(i), and (i)(3)(ii); and 1926.1126(i)(2)(i), (i)(3)(i), and (i)(3)(ii))

These provisions require employers to provide an initial medical examination to workers newly assigned to operations that involve exposure to Cr(VI) at or above the AL. These workers must receive the initial medical examination within 30 days of assuming this new assignment. The content of this initial medical examination consists of the same medical and work history, and physical examination of the skin and respiratory tract, described for the initial medical examination provided to current workers under item 1 of this section. These initial medical examinations establish a medical baseline for each worker, and identify workers who have medical conditions that may become worse under Cr(VI) exposure.

6. Medical Examination at the Termination of Employment (§§ 1910.1026(k)(2)(vi) and (k)(3)(i)-(k)(3)(iii); 1915.1026(i)(2)(vi) and (i)(3)(i)-(i)(3)(iii); and 1926.1126(i)(2)(vi) and (i)(3)(i)-(i)(3)(iii))

The requirements specified by §§ 1910.1026(k)(2)(vi), 1915.1026(i)(2)(vi), and 1926.1126(i)(2)(vi) address the medical examination that employers must provide to workers exposed to Cr(VI) at or above the AL when these workers terminate their employment; employers do not have to provide this medical examination when a worker's last medical examination satisfied the requirements of these standards and was administered to the worker less than 6 months prior to the date of termination. The content of these medical examinations is identical to the content of the medical examinations with additional testing described under §§ 1910.1026(k)(3)(i)-(k)(3)(iii), 1915.1026(i)(3)(i)-(i)(3)(iii), and 1926.1126(i)(3)(i)-(i)(3)(iii). These medical examinations assure that no worker terminates employment with an active, but undiagnosed, medical condition resulting from exposure to Cr(VI). In addition, these medical examinations provide workers and their PLHCPs with information that may be useful in diagnosing and treating latent effects of Cr(VI) exposure that may arise after termination of employment.

7. Information Provided to the PLHCP (§§ 1910.1026(k)(4), 1915.1026(i)(4), and 1926.1126(i)(4))

Paragraph (k)(4) of the general industry standard, and paragraph (i)(4) of the shipyard-employment and construction standards, require the employer to provide the PLHCP with the following information: a copy of the appropriate standard; a description of the affected worker's former, current, and anticipated duties as they relate to Cr(VI) exposure; the worker's former, current, and anticipated exposure level; a description of any personal protective equipment used or to be used by the worker, including when and for how long the worker has used that equipment; and information from records of employment-related medical examinations previously provided to the affected worker that are within the control of the employer. OSHA believes that making the required information available to the PLHCP will aid the PLHCP in evaluating the signs and symptoms of potential Cr(VI)-related health effects. Information on the worker's exposures to Cr(VI), the worker's use of personal-protective equipment, and the results of previous examinations, when possible, will provide important information that the PLHCP can use, in conjunction with information gained from the required medical and work histories, in determining whether the observed symptoms are a result of Cr(VI) exposure. Making this information available to PLHCPs also assists them in evaluating an worker's health and fitness for specific job assignments involving Cr(VI) exposure.

8. PLHCP's Written Medical Opinion (§§ 1910.1026(k)(5), 1915.1026(h)(5), and 1926.1126(i)(5))

These paragraphs require the employer to obtain a written medical opinion from the PLHCP within 30 days for each medical examination performed on a worker. This written opinion must contain the following information: the PLHCP's opinion as to whether the worker would be placed at increased risk of material health impairment as a result of exposure to Cr(VI); any recommended limitations on the worker's exposure or use of personal protective equipment; and a statement that the PLHCP has explained to the worker the results of the medical examination, including any medical conditions related to Cr(VI) exposure that require further evaluation or treatment, and any special provisions for use of protective clothing or equipment. In the opinion, the PLHCP must not reveal to the employer specific findings or diagnoses unrelated to occupational exposure to Cr(VI). Employers must provide a copy of the PLHCP's written medical opinion to the examined worker within 2 weeks after receiving the opinion.

Under the standards, the PLHCP is not be allowed to include in the written opinion provided to the employer any findings or diagnoses that are unrelated to Cr(VI) exposure. This provision reassures workers participating in medical surveillance that they will not be penalized or embarrassed by the employer obtaining information about them not directly pertinent to their Cr(VI) exposure. The worker would be informed directly by the PLHCP of all results of his or her medical examination, including conditions of a non-occupational origin, but the employer would only receive information necessary to make decisions regarding worker placement and protective-equipment selection relative to Cr(VI) exposures**.**

The purpose in requiring the employer to obtain a PLHCP's written opinion is to provide the employer with medical information to use in determining the worker's initial job assignments,

and to assess the worker's ability to use protective clothing and equipment. The PLHCP's written opinion also informs the employer about whether the worker has a condition indicating Cr(VI) overexposure. The prohibition against providing the employer with information regarding conditions unrelated to Cr(VI) exposure ensures that discussions between the PLHCP and patient are open and candid, thereby enhancing diagnosis and treatment. The requirement that the PLHCP's opinion be in writing ensures, among other things, that the information is available for future reference. Providing workers with a copy of the PLHCP's written opinion informs them of the medical examination results so that they can determine the need for, and evaluate the effectiveness of, treatments and other interventions.

G. Communication of Chromium (VI) Hazards to Employees (§§ 1910.1026(l), 1915.1026(j), and 1926.1126(j))

1. Paragraph (l)(1) of the general industry standard and paragraph (j)(1) of the shipyard and construction standards requires chemical manufacturers, importers, distributors and employers to comply with requirements of the Hazard Communication Standard (HCS) (Sec. 1910.1200). In classifying the hazards of chromium (VI) at least the following hazards are to be addressed: cancer, eye irritation, and skin sensitization. Employers must include Cr(VI) in the hazard communication program established to comply with the HCS. Employers must ensure that each worker has access to labels on containers of Cr(VI) and to safety data sheets, and is trained in accordance with the requirements of HCS.[7]

2. Employee Information and Training (§§ 1910.1026(l)(2), 1915.1026(j)(2), and 1926.1126(j)(2))

Paragraph (l)(2) of the general industry standard, and paragraphs (j)(2) in the shipyard employment and construction standards, require the employer to ensure that each worker can demonstrate knowledge of the contents of these standards, and the purpose and a description of the medical-surveillance program required by these standards. The employer also must make a copy of the appropriate standard readily available without cost to all affected workers.

Upon further analysis, the requirement that employers provide training to workers under (l)(2) of the general industry standard and paragraphs (j)(2) in the shipyard employment and construction standards is not considered to be a collection of information. OSHA is not taking burden for them under Items 12 or 13 of this Supporting Statement.

H. Recordkeeping (§§ 1910.1026(m), 1915.1026(k), and 1926.1126(k))

7 The Agency accounts for the other burden hours and costs associated with compliance with the HCS, such as the development of a hazard communication program, under the Information Collection Request (ICR) for the HCS, OMB Control No. 1218-0072. The burden hours and costs for the labels and training required by the HCS as it pertains to Cr(VI) are addressed in this Supporting Statement.

The recordkeeping requirements in these standards conform to Section 8(c) of the OSH Act, which authorizes OSHA to require employers to keep and make available records as necessary or appropriate for the enforcement of the Act or for developing information regarding the causes and prevention of occupational injuries and illnesses. The recordkeeping provisions also are consistent with OSHA's standard on access to worker exposure and medical records (29 CFR 1910.1020).

1. Air Monitoring Data (§§ 1910.1026(m)(1), 1915.1026(k)(1), and 1926.1126(k)(1)) and Medical Surveillance (§§ 1910.1026(m)(4), 1915.1026(k)(4), and 1926.1126(k)(4))

Air monitoring data. Employers who perform air monitoring to determine worker Cr(VI) exposures must keep records that identify the monitored worker and all other workers whose exposures are represented by the monitoring samples. The employer must keep accurate records for each exposure measurement taken. These records must include the following information: the date of measurement for each sample taken; the operation involving exposure to Cr(VI) that was monitored; sampling and analytical methods used and evidence of their accuracy; the number, duration, and results of samples taken; the type of personal-protective equipment used by the worker; and the name, social security number, and job classification of all workers represented by the monitoring, indicating which workers were actually monitored. Also, employers must ensure that exposure records are maintained and made available in accordance with 29 CFR 1910.1020.[8]

Establishing and maintaining records of air monitoring data permit employers, workers, OSHA, and other interested parties (i.e., industry trade associations and worker unions, or comparable organizations) to identify the levels, durations, and extent of Cr(VI) exposure, determine if existing controls are protecting workers or whether additional controls are necessary to provide the required protection, and assess the relationship between Cr(VI) exposure and the subsequent development of medical diseases. These records also allow OSHA to ascertain whether employers are complying with the standards, thereby ensuring that workers are receiving adequate protection from Cr(VI) exposure.

Medical surveillance. The employer must establish and maintain an accurate medical-surveillance record for each worker subject to the medical surveillance-requirements of the standards. Medical-surveillance records must include the following information: the name, social security number, and job classification of the worker; a copy of the PLHCP's written opinions; and a copy of the information provided to the PLHCP. This information includes the worker's duties as they relate to Cr(VI) exposure, Cr(VI) exposure levels, and descriptions of personal-protective equipment used by the worker. Also, the employer must ensure that worker medical records are maintained in accordance with 29 CFR 1910.1020.

8The Agency assumes that employers will not use either performance-oriented option (i.e., historical monitoring data or objective data) to be consistent with the FEA. Therefore, OSHA also is not taking any recordkeeping burden for these options in this ICR as specified in the final standards at §§ 1910.1026(m)(2) and (m)(3), 1915.1026(k)(2) and (k)(3), and 1926.1126(k)(2) and (k)(3).

Medical records are necessary and appropriate for the protection of worker health, the enforcement of the standards, and the development of information regarding the causes and prevention of Cr(VI)-related illnesses. Complete medical records, including the record of the examination administered upon termination of employment, are important to the worker because this information is necessary for the proper evaluation of the worker's health, and will assist the worker and the worker's PHLCP in making valid health-care decisions. Complete medical records also will alert employers to worker health problems that are related to Cr(VI) exposure, thereby permitting the employer to modify workplace conditions causing the harmful Cr(VI) exposures. Finally the records will be useful to the Agency and others in enumerating illnesses and deaths attributable to Cr(VI), evaluating compliance programs, and assessing the efficacy of the standards.

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 improved information technology when establishing and maintaining the required records. The Agency wrote the collections of information of the Standard in performance-oriented language, i.e., in terms of what data to collect, not how to record the data.

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

The information collection requirements of the standards 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 the Agency (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 the Standard do not have a significant impact on a substantial number of small entities.

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

The information collection frequencies specified by the standards are the minimum frequencies that the Agency believes are necessary to ensure that employers and OSHA can effectively monitor the exposure and health status of workers, thereby preventing serious illness or death resulting from hazardous Cr(VI) exposure.

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

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

Under paragraph (d)(4) of the standards, employers must inform workers, in writing or by posting, of the exposure-assessment results no later than 15 (5 days for maritime and construction) working days after obtaining the results. If these results indicate that a worker's exposures are above the PEL, the notification must state what corrective actions the employer is taking to reduce the employee's exposure to or below the PEL. Additionally, paragraph (k)(5) of the general industry standard, and paragraphs (h)(5) and (i)(5) of the shipyard-employment and construction standards, respectively, require employers to provide employees with a copy of the PLHCP's written opinion regarding their medical examination within two weeks after receipt. The reasons for these requirements are explained above in Item 2 of this ICR.

In addition, under OSHA's Access to Employee Exposure and Medical Records Standard (§1910.1020), employers must maintain exposure monitoring results for 30 years.

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 (44 U.S.C. 3506(c)(2)(AA)), OSHA published a Federal Register notice on December 17, 2015 (80 FR 78775) soliciting comments from the public and other interested parties on the collections of information contained in the Hexavalent Chromium Standards for General Industry (29 CFR 1910.1026), Shipyard Employment (29 CFR 1915.1026), and Construction (29 CFR 1926.1126) (Docket No. OSHA-2012-0034). This notice was part of a preclearance consultation program that provided interested parties with an opportunity to comment on OSHA's request for an extension by OMB of a previous approval of the information collection requirements found in the Hexavalent Chromium Standard. The Agency received no comments in response to this notice.

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.

To ensure that the personal information contained in medical records required by the standards remains confidential, the Agency developed and implemented 29 CFR 1913.10 ("Rules of Agency Practice and Procedure Concerning OSHA Access to Employee Medical Records") to regulate access to these records.

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

The paperwork requirements specified by the Cr(VI) standards do not 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 collections of information, identifying and using appropriate wage-rate categories.**

Determinations for Burden Hours, Burden-Hour Cost, and Capital Cost

OSHA based these determinations on its Final Economic Analysis ("FEA") and the "Cost and Economic Impact Analysis of a Revised OSHA Standard for Hexavalent Chromium, Volumes I and II," prepared by Shaw Environmental Inc. ("the Shaw Report") (Exs. 49 and 50 in the rulemaking docket, H-054A). Tables 1-33 referenced in this Supporting Statement may be downloaded from the *Supplementary Documents* section in ROCIS. These tables list the detailed data, based on assumptions from the FEA and Shaw Report, OSHA used to make these determinations; these data include, as appropriate, affected industrial sectors, number of affected plants, number of affected workers, time to perform the activity, and wage rates for in-house workers performing the specified activities. The Agency was able to inflate the industry profile data by the same percentage as the change in number of establishments in County Business Patterns data from U.S. Census Bureau from 2006 to 2013[9].

Table A also attached to this Supporting Statement, provides a summary of the determinations made by the Agency for the burden hour, burden-hour cost, and capital cost under Items 12 and 13 of this Supporting Statement.
The Agency initially obtained the wage rates for the private-sector and public-sector occupational categories used in making these determinations from "Employer Cost for Employee Compensation," National Compensation Survey—Compensation Cost Trends, U.S. Department of Labor, Bureau of Labor Statistics, 2003. For this ICR, these rates were adjusted by the same percentage the National Occupational Employment and Wage Estimates (Occupational Employment Statistics published by the U.S. Department of Labor, Bureau of Labor Statistics) changed from 2003 to 2014[10]. These wage rates are for nonsupervisory, supervisory, and clerical workers, and vary by industrial sector; see the relevant tables attached to this Summary Statement for the wage rates used for these occupational categories across the different industrial sectors. The wage rates for these occupational categories include an adjustment for the average level of fringe benefits for these occupational categories.

Information collected by the Agency during the investigation is not subject to the PRA under 5 CFR 1320.4(a)(2). Therefore, OSHA takes no burden or cost in Items 12 and 14 of this Supporting Statement.

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9 U.S Census, 2013. County Business Patterns. Available at http://www.census.gov/econ/cbp/download/ (Accessed October 28, 2015).

10 Bureau of Labor Statistics (BLS), 2014c. May 2014 National Occupational Employment and Wage Estimates United States. Available at http://www.bls.gov/oes/tables.htm (Accessed October 27, 2015).

13. Provide an estimate of the total annual cost burden to respondents or recordkeepers resulting from the collection of information. (Do not include the cost of any hour burden shown in Items 12 and 14).

- The cost estimate should be split into two components: (a) a total capital and start-up cost component (annualized over its expected useful life); and (b) a total operation and maintenance and purchase of service component. The estimates should take into account costs associated with generating, maintaining, and disclosing or providing the information. Include descriptions of methods used to estimate major cost factors including system and technology acquisition, expected useful life of capital equipment, the discount rate(s), and the time period over which costs will be incurred. Capital and start-up costs include, among other items, preparations for collecting information such as purchasing computers and software; monitoring, sampling, drilling and testing equipment; and record storage facilities.

- If cost estimates are expected to vary widely, agencies should present ranges of cost burdens and explain the reasons for the variance. The cost of purchasing or contracting out information collection services should be a part of this cost burden estimate. In developing cost burden estimates, agencies may consult with a sample of respondent (fewer than 10), utilize the 60-day pre-OMB submission public comment process and use existing economic or regulatory impact analysis associated with the rulemaking containing the information collection, as appropriate.

- Generally, estimates should not include purchases of equipment or services, or portions thereof, made: (1) prior to October 1, 1995, (2) to achieve regulatory compliance with requirements not associated with the information collection, (3) for reasons other than to provide information or keep records for the government, or (4) as part of customary and usual business or private practices.

As noted above, Tables 1-33 referenced in this Supporting Statement may be downloaded from the *Supplementary Documents* section in www.reginfo.gov. The tables provide detailed data about capital costs. Specific and total capital cost for the paperwork requirements contained in this standard are also identified and provided in the column "Proposed Capital Cost (Item 13)" of Table A ("Summary of Burden Hours, Burden-Hour Cost, and Capital Cost Under Items 12 and 13 of this Supporting Statement").

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.

COSTS TO FEDERAL GOVERNMENT

Usually, OSHA requests access to records during an inspection. Information collected by the Agency during the investigation is not subject to the PRA under 5 CFR 1320.4(a)(2). Therefore, OSHA takes no burden or cost in Item14 of this Supporting Statement.

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

OSHA is requesting an adjustment decrease in the burden hours of these paperwork requirements from 541,582 to 493,968 hours, for a total decrease of 47,614 hours.

The reduction is primarily the result of the estimated decrease of exposed workers and reduction in the number of plants in specific-industry sectors. The Agency was able to adjust the industry profile data in Tables 1 through 33 by the same percentage as the change in number of establishments for the relevant NAICS from 2006 to 2013 (County Business Patterns data from the U.S. Census Bureau).

Capital costs have increased, from $46,589,912 to $46,712,927, a total increase of $123,015. The Agency estimates an overall increase in capital costs due to the increase in sampling cost, medical exam and testing costs, and costs of materials for qualitative fit testing.

Information collected by the Agency during the investigation is not subject to the PRA under 5 CFR 1320.4(a)(2). Therefore, OSHA takes no burden or cost in Items 12 and 14 of this Supporting Statement.

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

OSHA will not publish the information collected under the Cr(VI) standards.

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

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

18. Explain each exception to the certification statement.

OSHA is not requesting an exception to the certification statement.

B. COLLECTIONS OF INFORMATION EMPLOYING STATISTICAL METHODS

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

Table A
Summary of Burden Hours, Burden Hour Cost (Item 12), Capital Cost (Item 13), and Total Responses

Collection of Information Requirements	Existing Burden Hours (Item 12)	Proposed Burden Hours (Item 12)	Change	Burden hour Cost (Item 12)	Existing Capital Cost (Item 13)	Proposed Capital Cost (Item 13)	Change	Number of Responses
A. Exposure Determination (paragraph (d) of §§ 1910.1026, 1915.1026, and 1926.1126)								
1. Scheduled Monitoring Option: Initial Exposure Monitoring (paragraph (d)(2)(i) of §§ 1910.1026, 1915.1026, and 1926.1126)								
a. Contract Cost for an Industrial Hygiene Technician to Perform Initial Exposure Monitoring (Table 1)	-	-	-	-	$3,048,250	$3,112,617	$64,367	-
b. Contract Cost for a Laboratory to Conduct Analysis of Initial Exposure-Monitoring Air Samples (Table 2)	-	-	-	-	$935,200	$1,010,800	$75,600	-
2. Scheduled Monitoring Option: Semi-Annual Exposure Monitoring (paragraph (d)(2)(iii) of §§ 1910.1026, 1915.1026, and 1926.1126)								
a. Employee Time and Cost to Conduct Semi-Annual Exposure Monitoring (Table 3)	4,930	4,463	-467	$138,815	-	-	-	7,336
b. Contract Cost for an Industrial Hygiene Technician to Perform Semi-Annual Exposure Monitoring (Table 4)	-	-	-	-	$13,556,384	13,358,026	-$198,358	-
c. Contract Cost for a Laboratory to Conduct Analysis of Semi-Annual Exposure-Monitoring Air Samples (Table 5)	-	-	-	-	$4,943,561	5,197,478	$253,917	-
3. Scheduled Monitoring Option: Quarterly Exposure Monitoring (paragraph (d)(2)(iv) of §§ 1910.1026, 1915.1026, and 1926.1126)								

Collection of Information Requirements	Existing Burden Hours (Item 12)	Proposed Burden Hours (Item 12)	Change	Burden hour Cost (Item 12)	Existing Capital Cost (Item 13)	Proposed Capital Cost (Item 13)	Change	Number of Responses
a. Employee Time and Cost to Conduct Quarterly Exposure Monitoring (Table 6)	157,122	148,807	-8,315	$4,675,850	-	-	-	8,394
b. Contract Cost for an Industrial Hygiene Technician to Perform Quarterly Exposure Monitoring (Table 7)	-	-	-	-	$5,439,545	$5,328,238	-$111,307	-
c. Contract Cost for a Laboratory to Conduct Analysis of Quarterly Exposure-Monitoring Air Samples (Table 8)	-	-	-	-	$1,466,910	$1,555,739	$88,828	-
4. Employee Notification of Determination Results (paragraph (d)(4) of §§ 1910.1026, 1915.1026, and 1926.1126)								
a. Supervisor Time and Cost to Notify Employees of quarterly monitoring results (Table 9)	11,468	10,529	-939	$468,618	-	-	-	42,114
b. Supervisor Time and Cost to Notify Employees of Initial Monitoring Results (Table 9a - Remand)	26,091	25,971	-121	$779,227	-	-	-	103,882
c. Supervisor Time and Cost to Notify Employees of semi-annual monitoring results (Table 9b - Remand)	16,790	15,447	-1,343	$446,607	-	-	-	61,788
B. Regulated Areas 1910.1026(e)								
1. Demarcation (§ 1910.1026(e)(2))	0	0	0	0	-	-	-	-
C. Respiratory Protection (§§ 1910.1026(g), 1915.1026(f), and 1926.1126(f))								
1. Respiratory-Protection Program: Qualitative Fit Testing for Respirator Use (§§ 1910.1026(g)(2), 1915.1026(f)(2), and 1926.1126(f)(2))								
a. Employee and Industrial Hygiene Technician Time and Cost to Conduct Qualitative Fit Testing (Table 10)	13,947	13,506	-441	$374,725	-	-	-	27,011

Collection of Information Requirements	Existing Burden Hours (Item 12)	Proposed Burden Hours (Item 12)	Change	Burden hour Cost (Item 12)	Existing Capital Cost (Item 13)	Proposed Capital Cost (Item 13)	Change	Number of Responses
b. Cost of Materials for Qualitative Fit Testing (Table 11)	-	-	-	-	$2,166	$2,376	$210	-
2. Respiratory-Protection Program: Quantitative Fit Testing for Respirator Use (§§ 1910.1026(g)(2), 1915.1026(f)(2), and 1926.1126(f)(2))								
a. Employee Time and Cost to Conduct Quantitative Fit Testing (Table 12)	41	45	4	$1,464	-	-	-	90
b. Contract Cost for an Industrial Hygienist to Conduct Quantitative Fit Testing for Respirators (Table 13)	-	-	-	-	$4,016	$4,981	$965	-
3. Respiratory-Protection Program: Medical Questionnaire for Respirator Use (§§ 1910.1026(g)(2), 1915.1026(f)(2), and 1926.1126(f)(2))								
a. Employee Time and Cost to Complete the Medical Questionnaire for Respirator Use (Table 14)	3,277	3,116	-160	$87,355	-	-	-	18,337
b. Contract Cost for a PLHCP to Review the Medical Questionnaire for Respirator Use (Table 15)	-	-	-	-	$777,479	$836,134	$58,656	-
4. Respiratory-Protection Program: Follow-up Medical Examination for Respirator Use (§§ 1910.1026(g)(2), 1915.1026(f)(2), and 1926.1126(f)(2))								
a. Employee Time and Cost to Complete the Medical Examination for Respirator Use (Table 16)	13,300	12,649	-651	$290,272	-	-	-	4,216

Collection of Information Requirements	Existing Burden Hours (Item 12)	Proposed Burden Hours (Item 12)	Change	Burden hour Cost (Item 12)	Existing Capital Cost (Item 13)	Proposed Capital Cost (Item 13)	Change	Number of Responses
b. Contract Cost for a PLHCP to Conduct the Medical Examination for Respirator Use (Table 17)	-	-	-	-	$551,468	$594,000	$42,532	-
D. Protective Work Clothing and Equipment (§§1910.1026(h), 1915.1026(g), and 1926.1126(g))								
1. Removal and Storage (§§ 1910.1026(h)(2)(iv), 1915.1026(g)(2)(iv), and 1926.1126(g)(2)(iv))								
a. Contract Cost to Obtain Cr(VI) Hazard-Warning Labels for Bags or Containers Used to Store Cr(VI)-Contaminated Protective Clothing or Equipment (Table 18)	-	-	-	-	$2,258	$2,302	$44	-
b. Employer Cost to Affix Cr(VI) Hazard-Warning Labels for Bags or Containers Used to Store Cr(VI)-Contaminated Protective Clothing or Equipment (Table 18 (a))	124	112	-12	$3,896.00	-	-	-	5,610
2. Cleaning and Replacement (§§ 1910.1026(h)(3)(iii), 1915.1026(g)(3)(iii), and 1926.1126(g)(3)(iii))								
a. Supervisor Time and Cost to Inform Laundry Contractor About Cr(VI)-Contaminated Protective Clothing or Equipment (Table 19)	1,327	1,288	-38	$48,525	-	-	-	64,410
E. Housekeeping (§ 1910.1026(j))								
1. Disposal (§ 1910.1026(j)(3)(ii))	0	0	0	0	0	0	0	0
F. Medical Surveillance (§§ 1910.1026(k), 1915.1026(i), and 1926.1126(i))								

Collection of Information Requirements	Existing Burden Hours (Item 12)	Proposed Burden Hours (Item 12)	Change	Burden hour Cost (Item 12)	Existing Capital Cost (Item 13)	Proposed Capital Cost (Item 13)	Change	Number of Responses
1. Initial Medical Examination (§§ 1910.1026(k)(1)(i)(A), (k)(3)(i), and (k)(3)(ii); 1915.1026(i)(1)(i)(A), (i)(3)(i), and (i)(3)(ii); and 1926.1126(i)(1)(i)(A), (i)(3)(i), and (i)(3)(ii))								
a. Employee Time and Cost to Complete the Initial Medical Examination (Table 20)	17,140	16,258	-882	$453,431	-	-	-	108,133
b. Contract Cost for a PLHCP to Conduct the Initial Medical Examination (Table 21)	-	-	-	-	$786,420	$842,799	$56,379	-
2. Annual Medical Examination (§§ 1910.1026(k)(2)(ii), (k)(3)(i), and (k)(3)(ii); 1915.1026(i)(2)(ii), (i)(3)(i), and (i)(3)(ii); and 1926.1126(i)(2)(ii), (i)(3)(i), and (i)(3)(ii))								
a. Employee Time and Cost to Complete the Annual Medical Examination (Table 22)	163,184	143,615	-19,569	$4,102,028	-	-	-	48,345
b. Contract Cost for a PLHCP to Conduct the Medical Examination (Table 23)	-	-	-	-	$7,254,681	$7,272,952	$18,270	-
3. Initial Medical Examination with Additional Tests (§§1910.1026(k)(1)(i)(B) and (k)(3)(i)-(k)(3)(iii); 1915.1026(i)(1)(i)(B) and (i)(3)(i)-(i)(3)(iii); and 1926.1126(i)(1)(i)(B) and (i)(3)(i)-(i)(3)(iii))								
a. Employee Time and Cost to Complete the Initial Medical Examination with Additional Tests (Table 24)	111	105	-6	$2,915	-	-	-	26
b. Contract Cost for a PLHCP to Conduct the Initial Medical Examination with Additional Tests (Table 25)	-	-	-	-	$6,706	$7,186	$481	-

Collection of Information Requirements	Existing Burden Hours (Item 12)	Proposed Burden Hours (Item 12)	Change	Burden hour Cost (Item 12)	Existing Capital Cost (Item 13)	Proposed Capital Cost (Item 13)	Change	Number of Responses
4. Annual Medical Examination with Additional Tests (§§ 1910.1026(k)(2)(ii) and (k)(3)(i)-(k)(3)(iii); 1915.1026(i)(2)(ii) and (i)(3)(i)-(i)(3)(iii); and 1926.1126(i)(2)(ii) and (i)(3)(i)-(i)(3)(ii))								
a. Employee Time and Cost to Complete the Annual Medical Examination with Additional Tests (Table 26)	825	726	-99	$20,375	-	-	-	242
b. Contract Cost for a PLHCP to Conduct the Annual Medical Examination with Additional Tests (Table 27)	-	-	-	-	$65,631	$65,123	-$508	-
5. Medical Examination After Initial Assignment (§§1910.1026(k)(2)(i), (k)(3)(i), and (k)(3)(ii);1915.1026(i)(2)(i), (i)(3)(i), and (i)(3)(ii); and 1926.1126(i)(2)(i), (i)(3)(i), and (i)(3)(ii))								
a. Employee Time and Cost to Complete the Medical Examination After Initial Assignment (Table 28)	31,910	27,405	-4,505	$746,192	-	-	-	6,898
b. Contract Cost for a PLHCP to Conduct the Medical Examination After Initial Assignment (Table 29)					$3,626,744	$3,520,628	-$106,115	
6. Medical Examination at the Termination of Employment (§§ 1910.1026(k)(2)(vi) and (k)(3)(i)-(k)(3)(iii); 1915.1026(i)(2)(vi) and (i)(3)(i)-(i)(3)(iii); and 1926.1126(i)(2)(vi) and (i)(3)(i)-(i)(3)(ii))								
a. Employee Time and Cost to Complete the Medical Examination at the Termination of Employment (Table 30)	37,048	31,813	-5,235	$858,747	-	-	-	11,422

Collection of Information Requirements	Existing Burden Hours (Item 12)	Proposed Burden Hours (Item 12)	Change	Burden hour Cost (Item 12)	Existing Capital Cost (Item 13)	Proposed Capital Cost (Item 13)	Change	Number of Responses
b. Contract Cost for a PLHCP to Conduct the Medical Examination at the Termination of Employment (Table 31)	-	-	-	-	$4,122,494	4,001,548	-$120,946	-
7. Information Provided to the PLHCP (§§ 1910.1026(k)(4), 1915.1026(i)(4), and 1926.1126(i)(4))								
a. Clerical Time and Cost to Provide Information to the PLHCP (Table 32)	9,142	8,671	-471	$169,342	-	-	-	108,386
8. PLHCP's Written Medical Opinion								
a. Employee and Clerical Time and Cost to Provide the PLHCP's Written Medical Opinion to Employee (burden taken in Table 33)	-	-	-	-	-	-	-	-
G. Communication of Cr(VI) Hazards to Employees (§§ 1910.1026(l), 1915.1026(j), and 1926.1126(j))								
1. Employee Information and Training (§§ 1910.1026(l)(2), 1915.1026(j)(2), and 1926.1126(j)(2))	0	0	0	0	0	0	0	0
H. Recordkeeping (§§ 1910.1026(m), 1915.1026(k), and 1926.1126(k))								
a. Clerical Time and Cost to Establish and Maintain Record for Air Monitoring Data and Medical Surveillance (Table 33)	33,720	29,442	-4,278	$633,401	-	-	-	368,023
b. Federal Access to Records	87	0	-87	$0.00	-	-	-	0
TOTAL	**541,582**	**493,968**	**-47,614**	**$14,301,785**	**$46,589,912**	**$46,712,927**	**$123,015**	**994,663**