

**SUPPORTING STATEMENT FOR THE
INFORMATION COLLECTION REQUIREMENTS OF THE
COKE OVEN EMISSIONS STANDARD (29 CFR 1910.1029)¹
(OMB CONTROL NO. 1218-0128 (January 2015))**

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 Occupational Safety and Health Act's (OSH Act) main objective 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).

For toxic substances, the OSH Act contains specific statutory language. Thus, as appropriate, health standards must include provisions for monitoring and measuring worker exposure, medical examinations and other tests, control and technological procedures, suitable protective equipment, labels and other appropriate forms of warning, and precautions for safe use or exposure (29 U.S.C. 655 and 657). In this regard, the OSH Act mandates "regulations requiring employers to maintain accurate records of employee exposure to potentially toxic materials or other harmful physical agents which are required to be monitored and measured," and further requires that employers notify workers exposed to concentrations over prescribed limits of this fact, and of the corrective action they are taking (29 U.S.C. 657).

Under the authority granted by the OSH Act, the Occupational Safety and Health Administration (OSHA) published a health standard governing worker exposure to coke oven emissions, the Coke Oven Emissions Standard (the "COE Standard" or "Standard"), 29 CFR 1910.1029.² The purpose of the Standard is to reduce the incidence of cancer, especially lung cancer among workers exposed to coke oven emissions (COE). COE results primarily from the destructive distillation or carbonization of coal during the production of coke, a process commonly found in

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

²29 CFR 1910.1029 is incorporated by reference in the Construction and Shipyard Employment standards (29 CFR 1926.1129 and 29 CFR parts 1915 and 1917, respectively).

the steel industry. Items 2 and 12 below list and describe the specific information collection requirements of the COE Standard.

Exposure to coke oven emissions occurs to workers in the aluminum, steel, graphite, electrical, and construction industries. Chronic (long-term) exposure to coke oven emissions in humans results in conjunctivitis, severe dermatitis, and lesions of the respiratory system and digestive system. Cancer is the major concern from exposure to coke oven emissions. Epidemiologic studies of coke oven workers have reported an increase in cancer of the lung, trachea, bronchus, kidney, prostate, and other sites. Animal studies have reported tumors of the lung and skin from inhalation exposure to coal tar.

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.

Exposure Monitoring and Measurement (§ 1910.1029(e))

Monitoring Program (§ 1910.1029(e)(1))

(i) Each employer who has a place of employment where coke oven emissions are present shall monitor employees employed in the regulated area to measure their exposure to coke oven emissions.

(ii) The employer shall obtain measurements which are representative of each employee's exposure to coke oven emissions over an eight-hour period. All measurements shall determine exposure without regard to the use of respiratory protection.

(iii) The employer shall collect fullshift (for at least seven continuous hours) personal samples, including at least one sample during each shift for each battery and each job classification within the regulated areas including at least the following job classifications: (a) Lidman; (b) Tar chaser; (c) Larry car operator; (d) Luterman; (e) Machine operator, coke side; (f) Benchman, coke side; (g) Benchman, pusher side; (h) Heater; (i) Quenching car operator; (j) Pusher machine operator; (k) Screening station operator; (l) Wharfman; (m) Oven patcher; (n) Oven repairman; (o) Spellman; and (p) Maintenance personnel.

(iv) The employer shall repeat the monitoring and measurements required by this paragraph (e) (1) at least every three months.

Purpose: Employers who expose workers to COE must perform exposure monitoring in regulated areas³ to determine the extent of worker COE exposure. The employer shall obtain measurements which are representative of each worker's exposure to coke oven emissions over

³Regulated areas consist of: the coke-oven battery, including topside and its machinery, pushside and its machinery, coke side and its machinery, battery ends, wharf, and screening station; and the beehive oven and its machinery (29 CFR 1910.1029 (d)).

an eight-hour period. Employers must collect full-shift (i.e., for at least 7 continuous hours) personal samples, including at least 1 sample during each shift for each battery and each of the job classifications, without regard to the use of respiratory protection. Such monitoring assists employers in identifying areas of operation that may require additional efforts to reduce worker exposure and to come into compliance with the Standard. Exposure-monitoring results also assist employers in determining the need for engineering controls, instituting or modifying work practices, and in selecting appropriate respiratory protection to prevent workers from overexposure.

Employers must repeat exposure monitoring every 3 months for workers in COE regulated areas. The purpose of this periodic monitoring is because minor changes in processes, materials, or environmental conditions may increase the airborne concentration levels of COE. By using periodic monitoring, employers can also evaluate the effectiveness of selected control methods. In addition, these measurements remind both the employer and workers of the continuing need to protect against the hazards that could result from worker overexposure.

Redetermination (§ 1910.1029(e)(2)) Whenever there has been a production, process, or control change which may result in new or additional exposure to coke oven emissions, or whenever the employer has any other reason to suspect an increase in employee exposure, the employer shall repeat the monitoring and measurements required by paragraph (e)(1) of this section for those employees affected by such change or increase.

Purpose: The employer must perform additional monitoring if: a change occurs in COE-related production, processes, or controls that may result in new or additional worker exposure; or the employer has any other reason to suspect an increase in worker exposure. Such monitoring ensures that the work area is safe and alerts the employer that protection may still be needed.

Employee Notification (§ 1910.1029(e)(3))

(i) The employer must, within 15 working days after the receipt of the results of any monitoring performed under this section, notify each affected employee of these results either individually in writing or by posting the results in an appropriate location that is accessible to employees.

(ii) Whenever such results indicate that the representative employee exposure exceeds the permissible exposure limit, the employer shall, in such notification, inform each employee of that fact and of the corrective action being taken to reduce exposure to or below the permissible exposure limit.

Purpose: The employer must notify each affected worker in writing of the exposure-monitoring results within 15 working days after receiving the results. If the results exceed the permissible exposure limit (PEL), the employer must, in the written (or posted) notification of the results, inform each worker of the corrective actions the employer is taking to prevent worker overexposure.

The point of notification is to ensure that workers are aware of their exposures to OSHA-

regulated substances. The Agency concluded that this goal can be met either through individual written notification or through posting the results in a location that is accessible to workers.

Compliance Program (§ 1910.1029(f)(6))

(i) Each employer shall establish and implement a written program to reduce exposures solely by means of the engineering and work practice controls required in paragraph (f) of this section.

(ii) The written program shall include at least the following:

(a) A description of each coke oven operation by battery, including work force and operating crew, coking time, operating procedures and maintenance practices;

(b) Engineering plans and other studies used to determine the controls for the coke battery;

(c) A report of the technology considered in meeting the permissible exposure limit;

(d) Monitoring data obtained in accordance with paragraph (e) of this section;

(e) A detailed schedule for the implementation of the engineering and work practice controls required in paragraph (f) of this section; and

(f) Other relevant information.

(iii) If, after implementing all controls required by paragraph (f)(2)–(f)(4) of this section, or after January 20, 1980, whichever is sooner, or after completion of a new or rehabilitated battery the permissible exposure limit is still exceeded, the employer shall develop a detailed written program and schedule for the implementation of any additional engineering controls and work practices necessary to reduce exposure to or below the permissible exposure limit.

(iv) Written plans for such programs shall be submitted, upon request, to the Secretary and the Director, and shall be available at the worksite for examination and copying by the Secretary, the Director, and the authorized employee representative. The plans required under paragraph (f)(6) of this section shall be revised and updated at least annually to reflect the current status of the program.

Purpose: Employers must establish and implement a written program to reduce worker COE exposure to or below the PEL using the engineering and work-practice controls specified in paragraphs (e)(3)(ii),(f)(3)(i),(a), (b), (c), (f)(3)(ii),(f)(3)(iii)(b), and (f)(3)(iv) of the Standard. The written program must: Describe each coke-oven operation by battery, including work force and operating crew, coking time, mean to control coke oven emissions, operating procedures, and maintenance practices; engineering plans and other studies used to determine the controls for the coke battery; a report of the technology considered in meeting the PEL; monitoring data; and a detailed schedule for implementing the required engineering and work-practice controls. Written plans for such programs shall be submitted, upon request, to the Secretary and the

director, and shall be available at the worksite for examination and copying by the Secretary, the Director, and the authorized worker representative. The plans required under paragraph (f)(6) of this section shall be revised and updated at least annually to reflect the current status of the program.

Respiratory Protection (§ 1910.1029(g))

(2) *Respirator program.* The employer must implement a respiratory protection program in accordance with §1910.134(b) through (d) (except (d)(1)(iii)), and (f) through (m), which covers each employee required by this section to use a respirator.

Purpose: If respirators are required, the employer must establish a respiratory-protection program in accordance with 29 1910.134, paragraphs (b) through (d) (except (d)(1)(iii)), and (f) through (m). Paragraph (c) of 29 CFR 1910.134 requires employers to develop and implement a written respiratory-protection program with worksite-specific procedures, as well as elements for respirator use. The purpose of these requirements is to ensure that employers establish a standardized procedure for selecting, using, and maintaining respirators for each workplace in which respirators will be used. Developing written procedures ensures that employers implement a respirator program which covers each worker required to use a respirator. OSHA incurs the burden hours and costs resulting from these program requirements under the information collection request (ICR) for OSHA's Respiratory Protection Standard (29 CFR 1910.134), OMB Control Number 1218-0099.

Notification of Laundry Personnel (§ 1910.1029(h)(2)(vi))

The employer shall inform any person who cleans or launders protective clothing required by this section of the potentially harmful effects of exposure to coke oven emissions.

Purpose: Employers must notify laundry personnel who clean or launder protective clothing of the potential harmful effects of COE. This information allows such personnel to protect themselves from COE exposure.

Medical Surveillance (§ 1910.1029(j))

General (§ 1910.1029(j)(1), (j)(2), and (j)(3))

(j) *Medical surveillance* — (1) *General requirements.* (i) Each employer shall institute a medical surveillance program for all employees who are employed in a regulated area at least 30 days per year.

(ii) This program shall provide each employee covered under paragraph (j)(1)(i) of this section with an opportunity for medical examinations in accordance with this paragraph (j).

(iii) The employer shall inform any employee who refuses any required medical examination of the possible health consequences of such refusal and shall obtain a signed statement from the

employee indicating that the employee understands the risk involved in the refusal to be examined.

(iv) The employer shall assure that all medical examinations and procedures are performed by or under the supervision of a licensed physician, and are provided without cost to the employee.

(2) *Initial examinations.* At the time of initial assignment to a regulated area or upon the institution of the medical surveillance program, the employer shall provide a medical examination for employees covered under paragraph (j)(1)(i) of this section including at least the following elements:

(i) A work history and medical history which shall include smoking history and the presence and degree of respiratory symptoms, such as breathlessness, cough, sputum production, and wheezing;

(ii) A standard posterior-anterior chest x-ray;

(iii) Pulmonary function tests including forced vital capacity (FVC) and forced expiratory volume at one second (FEV 1.0) with recording of type of equipment used;

(iv) Weight;

(v) A skin examination;

(vi) Urinalysis for sugar, albumin, and hematuria; and

(vii) A urinary cytology examination.

(3) *Periodic examinations.* (i) The employer shall provide the examinations specified in paragraphs (j)(2) (i)–(vi) of this section at least annually for employees covered under paragraph (j)(1)(i) of this section.

(ii) The employer must provide the examinations specified in paragraphs (j)(2)(i) through (j)(2) (vii) of this section at least annually for employees 45 years of age or older or with five (5) or more years employment in the regulated area.

(iii) Whenever an employee who is 45 years of age or older or with five (5) or more years employment in a regulated area transfers or is transferred from employment in a regulated area, the employer must continue to provide the examinations specified in paragraphs (j)(2)(i) through (j)(2)(vii) of this section at least annually as long as that employee is employed by the same employer or a successor employer.

(iv) Whenever an employee has not taken the examinations specified in paragraphs (j)(3) (i)–(iii) of this section with the six (6) months preceding the termination of employment the employer shall provide such examinations to the employee upon termination of employment.

Purpose: Employers must implement a medical-surveillance program for workers who work in a regulated area for 30 or more days per year; these workers are referred to as "covered employees." The results of medical examinations administered under this program must be documented and maintained. Employers must inform any worker who refuses any required medical examination of the possible health consequences of such refusal and must obtain a signed statement from the worker indicating that the worker understands the risk involved in the refusal to be examined.

Documentation and maintenance of medical-examination results provide a continuous record of worker health. Physicians use these records to determine the extent to which workers have experienced COE-related health effects since their last examination. Further, if symptoms of organic damage appear, the physician often needs information about a worker's previous medical conditions to make an accurate diagnosis of the new condition, ascertain its apparent cause, and identify a course of treatment. Medical records also permit workers to determine whether or not they need treatment, or to evaluate the effectiveness of their employer's exposure-reduction program.

Employers must provide an initial medical examination including work and medical history, and a standard posterior-anterior chest x-ray, pulmonary function tests (including FVC and FEV 1.0), weight, urinalysis, skin examination, and a urinary cytologic examination for each covered employee. Thereafter, employers must ensure that covered workers who are: 45 years of age or older, or who have 5 or more years of employment in a regulated area, receive an annual medical examination. Whenever a worker who is 45 years of age or older or with five (5) or more years employment in a regulated area transfers or is transferred from employment in a regulated area, the employer must continue to provide the examinations specified in paragraphs (j)(2)(i) through (j)(2)(vii) of this section at least annually as long as that worker is employed by the same employer or a successor employer. Additional tests such as lateral and oblique x-rays or additional pulmonary function tests may be performed if deemed necessary. Employers must also provide a medical examination for covered workers who have not had a medical examination within 6 months of terminating employment.

Information provided to the physician (§ 1910.1029(j)(4))

The employer shall provide the following information to the examining physician:

- (i) A copy of this regulation and its Appendixes;
- (ii) A description of the affected employee's duties as they relate to the employee's exposure;
- (iii) The employee's exposure level or estimated exposure level;

- (iv) A description of any personal protective equipment used or to be used; and
- (v) Information from previous medical examinations of the affected employee which is not readily available to the examining physician.

Purpose: The employer must provide physicians with the following information: a copy of the Standard, including the appendices; a description of the worker's duties as they relate to the worker's COE exposure; the worker's actual or estimated COE exposure; a description of personal-protective equipment used or to be used by the worker; and information from previous employment-related medical examinations of the worker that are not readily available to the physician.

Making the required information available to the physician will aid in the evaluation of the worker's health and fitness for specific job assignments involving COE exposure. As noted earlier, if symptoms of organic damage appear, the physician often needs information about a worker's previous medical conditions to make an accurate diagnosis of the new condition, to ascertain its apparent cause, and to identify a course of treatment. Medical records also ensure that workers can determine whether or not treatment is needed, or to evaluate the effectiveness of the employer's exposure-reduction program.

Physician's Written Opinion (§ 1910.1029(j)(5))

(i) The employer shall obtain a written opinion from the examining physician which shall include:

(a) The results of the medical examinations;

(b) The physician's opinion as to whether the employee has any detected medical conditions which would place the employee at increased risk of material impairment of the employee's health from exposure to coke oven emissions;

(c) Any recommended limitations upon the employee's exposure to coke oven emissions or upon the use of protective clothing or equipment such as respirators; and

(d) A statement that the employee has been informed by the physician of the results of the medical examination and any medical conditions which require further explanation or treatment.

(ii) The employer shall instruct the physician not to reveal in the written opinion specific findings or diagnoses unrelated to occupational exposure.

(iii) The employer shall provide a copy of the written opinion to the affected employee.

Purpose: The employer must obtain and provide to the worker the physician's written opinion containing the following information: The results of the medical examination; the physician's

opinion indicating if the worker has any medical conditions that may place the worker at increased risk of material impairment to health from continued COE exposure; any recommended limitations on the worker's COE exposure or on the use of protective clothing or equipment such as respirators; and a statement that the physician informed the worker of the results of the medical examination, including any medical conditions that require further explanation or treatment.

The purpose of requiring the employer to obtain a written opinion from the physician is to provide the employer with medical information to aid in determining the initial placement of workers, and to assess a worker's ability to use protective clothing and equipment. The physician's opinion will also provide information to the employer about whether or not the worker has a condition indicating overexposure to COE. The requirement that a physician's opinion be written will ensure that the information is properly memorialized for later reference. The requirement to provide workers with a copy of the physician's written opinion will ensure that they are informed of the results of the medical examination so that they can assist in determining the need for, and evaluate the effectiveness of, treatment or other interventions.

Employee Information and Training (§ 1910.1029(k))

The requirements that employers provide training to workers under paragraph (k)(1)(i), (ii), (iii), (iv) are not considered to be a collection of information. OSHA is not taking burden for this activity under Item 12 of this Supporting Statement.

(2) Access to training materials. (i) The employer shall make a copy of this standard and its appendixes readily available to all employees who are employed in the regulated area.

(ii) The employer shall provide upon request all materials relating to the employee information and training program to the Secretary and the Director.

Purpose: Employers having the Standard readily available for workers helps ensure that they understand all provisions of the coke standard. An OSHA compliance officer reviews the training material to assess the employer's compliance with the training provisions of the standard.

Communication of Hazards (§1910.1029(l))

(1) *Hazard communication—general.* The employer shall include coke oven emissions in the program established to comply with the Hazard Communication Standard (HCS) (§1910.1200). The employer shall ensure that each employee has access to labels on containers of chemicals and substances associated with coke oven processes and to safety data sheets, and is trained in accordance with the provisions of HCS and paragraph (k) of this section. The employer shall ensure that at least the following hazard is addressed: Cancer.

(2) Signs. (i) The employer shall post signs in the regulated area bearing the legend:

DANGER
COKE OVEN EMISSIONS
MAY CAUSE CANCER
DO NOT EAT, DRINK, OR SMOKE
WEAR RESPIRATORY PROTECTION IN THIS AREA
AUTHORIZED PERSONNEL ONLY

(ii) In addition, the employer shall post signs in the areas where the permissible exposure limit is exceeded bearing the legend:

WEAR RESPIRATORY PROTECTION IN THIS AREA

(iii) The employer shall ensure that no statement appears on or near any sign required by this paragraph (1) which contradicts or detracts from the effects of the required sign.

(iv) The employer shall ensure that signs required by this paragraph (1)(2) are illuminated and cleaned as necessary so that the legend is readily visible.

(v) Prior to June 1, 2016, employers may use the following legend in lieu of that specified in paragraph (1)(2)(i) of this section:

DANGER
CANCER HAZARD
AUTHORIZED PERSONNEL ONLY
NO SMOKING OR EATING

(vi) Prior to June 1, 2016, employers may use the following legend in lieu of that specified in paragraph (1)(2)(ii) of this section:

DANGER
RESPIRATOR REQUIRED

(3) Labels. (i) The employer shall ensure that labels of containers of contaminated protective clothing and equipment include the following information:

CONTAMINATED WITH COKE EMISSIONS
MAY CAUSE CANCER
DO NOT REMOVE DUST BY BLOWING OR SHAKING

(ii) Prior to June 1, 2015, employers may include the following information on contaminated protective clothing and equipment in lieu of the labeling requirements in paragraph (1)(3)(i) of this section:

CAUTION
CLOTHING CONTAMINATED WITH COKE EMISSIONS
DO NOT REMOVE DUST BY BLOWING OR SHAKING

Purpose: The employer must post warning signs in regulated areas. Posting these signs serves to warn workers that they are in a hazardous area. Such signs warn workers that they can enter a regulated area only if they have authority to do so and a specific need exists to enter the area. Warning signs also supplement the training workers receive under the Standard.

Employers also must apply warning labels to all containers housing COE-contaminated protective clothing.” These hazard labels will alert personnel who launder protective clothing that the clothing is contaminated with COE, thereby allowing them to take necessary precautions to protect themselves from COE exposure.

Recordkeeping (§ 1910.1029(m))

Exposure Measurements and Medical Surveillance (§ 1910.1029(m)(1) and (m)(2))

(1) Exposure measurements. The employer shall establish and maintain an accurate record of all measurements taken to monitor employee exposure to coke oven emissions required in paragraph (e) of this section.

(i) This record shall include:

(a) Name, social security number, and job classification of the employees monitored;

(b) The date(s), number, duration and results of each of the samples taken, including a description of the sampling procedure used to determine representative employee exposure where applicable;

(c) The type of respiratory protective devices worn, if any;

(d) A description of the sampling and analytical methods used and evidence of their accuracy;
and

(e) The environmental variables that could affect the measurement of employee exposure.

(ii) The employer shall maintain this record for at least 40 years or for the duration of employment plus 20 years, whichever is longer.

(2) Medical surveillance. The employer shall establish and maintain an accurate record for each employee subject to medical surveillance as required by paragraph (j) of this section.

(i) The record shall include:

(a) The name, social security number, and description of duties of the employee;

(b) A copy of the physician's written opinion;

(c) The signed statement of any refusal to take a medical examination under paragraph (j)(1)(ii) of this section; and

(d) Any employee medical complaints related to exposure to coke oven emissions.

(ii) The employer shall keep, or assure that the examining physician keeps, the following medical records:

(a) A copy of the medical examination results including medical and work history required under paragraph (j)(2) of this section;

(b) A description of the laboratory procedures used and a copy of any standards or guidelines used to interpret the test results;

(c) The initial x-ray;

(d) The x-rays for the most recent five (5) years;

(e) Any x-ray with a demonstrated abnormality and all subsequent x-rays;

(f) The initial cytologic examination slide and written description;

(g) The cytologic examination slide and written description for the most recent 10 years; and

(h) Any cytologic examination slides with demonstrated atypia, if such atypia persists for 3 years, and all subsequent slides and written descriptions.

(iii) The employer shall maintain medical records required under paragraph (m)(2) of this section for at least 40 years, or for the duration of employment plus 20 years, whichever is longer.

Purpose: Employers must establish and maintain exposure-monitoring and medical-surveillance records. This requirement provides both workers and employers with access to useful information. The exposure-monitoring and medical-surveillance records required by this Standard will aid the worker and their physicians in determining whether or not treatment or other interventions are needed as a result of the worker's exposure to COE. The information also will enable employers to ensure that workers are not being overexposed to COE; such

information may alert the employer to take additional steps to reduce COE exposures.

Exposure-monitoring records and medical-surveillance records must be kept for at least 40 years, or for the duration of employment plus 20 years, whichever is longer. Records must be kept for extended periods because of the long latency associated with the development of cancers resulting from COE exposure.

Availability (§ 1910.1029(m)(3))

(i) The employer shall make available upon request all records required to be maintained by paragraph (m) of this section to the Secretary and the Director for examination and copying.

(ii) Employee exposure measurement records and employee medical records required by this paragraph shall be provided upon request to employees, designated representatives, and the Assistant Secretary in accordance with 29 CFR 1910.1020(a)–(e) and (g)–(i).

Purpose: Employers must provide all records required by the Standard on request to OSHA and NIOSH for examination and copying. Moreover, each worker's exposure-monitoring and medical records shall be provided upon request to that worker and their designated representatives.

Transfer of Records (§ 1910.1029(m)(4))

§ 1910.1028(m)(4)

(i) Whenever the employer ceases to do business, the successor employer shall receive and retain all records required to be maintained by paragraph (m) of this section.

(ii) The employer shall comply with any additional requirements involving transfer of records set forth in 29 CFR 1910.1020(h).

Paragraph (h) of §1910.1020 requires employers who cease to do business to transfer medical and exposure-monitoring records to the successor employer, who then must receive and maintain the records. If no successor employer is available, the employer must, at least three months before ceasing business, notify current workers who have records of their right to access these records.

OSHA considers the employer's transfer of records to a successor employer to be usual and customary communications during the transition from one employer to a successor employer. In this regard, the employer would communicate the location of all records, including worker exposure-monitoring and medical records, at the facility to the successor employer during the transfer of business operations, as a matter of usual and customary business practice.

In addition, OSHA accounts for the burden hours and costs resulting from the worker notification requirements under the Information Collection Request (ICR) for its Access to Employee Exposure and Medical Records Standard (§1910.1020), OMB Control No. 1218-0065.

Purpose: Workers and their designated representatives may use these records to evaluate worker medical status over the course of employment, to determine the effectiveness of the employer's exposure reduction program, and for other reasons.

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 the burden.

Employers may use improved information technology when making, keeping, and preserving the required records. The Standard is written in performance-oriented language, i.e., in terms of what data to collect, not how to collect the data.

4. Describe efforts to identify duplication. Show specifically why any similar information already available cannot be used or modified for use of 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 the Standard do not have a significant impact on a substantial number of small entities.

6. Describe the consequences 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 Standard are the minimum necessary to ensure that employers and OSHA can effectively monitor the exposure and health status of workers exposed to COE.

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.**

Employers are required to inform each worker either individually in writing or by posting the results of their exposure-monitoring results within 15 working days after receiving the results (29 CFR 1910.1029(e)(3)). If these results indicate worker exposures above the PEL, this written notification must state this fact and describe the corrective action the employer is taking to reduce the worker's exposure to or below the PEL.

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

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

Consultation with representatives of those from whom information is to be obtained or those who must compile records should occur at least once every three 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 notice in the Paperwork Reduction Act of 1995 (PRA-95) (44 U.S.C. 3506(c) (2)(A)), OSHA published a Federal Register on September 9, 2014 (79 FR 53450, Docket No. OSHA-2011-0181) soliciting comments from the public and other interested parties on the information collection requirements contained in the Coke Oven Emissions Standard (29 CFR 1910.1029). This notice was part of a preclearance consultation program that provides 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 Standard. The Agency did not receive any comments regarding the proposed information collection request.

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

The Agency will provide no 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 remains confidential, OSHA developed 29 CFR 1913.10 to regulate its 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 reasons why the agency considers the questions necessary, the specific uses to be made of the information, the explanation to be given to persons from whom the information is requested, and any steps to be taken to obtain their consent.

None of the provisions in the Standard require sensitive information.

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

- **Indicate the number of respondents, frequency of response, annual hour burden, and an explanation of how the burden was estimated. Unless directed to do so, agencies should not conduct special surveys to obtain information on which to base hour burden estimates. Consultation with a sample (fewer than 10) of potential respondents is desirable. If the hour burden on respondents is expected to vary widely because of differences in activity, size, or complexity, show the range of estimated hour burden, and explain the reasons for the variance. Generally, estimates should not include burden hours for customary and usual business practices.**
- **If this request for approval covers more than one form, provide separate hour burden estimates for each form and aggregate the hour burdens.**
- **Provide estimates of annualized costs to respondents for the hour burdens for collections of information, identifying and using appropriate wage rate categories.**

Wage Rates

In determining the wage rates for the various occupations that perform the information collection requirements, OSHA used the most recent data from *Occupational Employment Statistics*, Bureau of Labor Statistics (BLS), U.S. Department of Labor (DOL), May 2013. The specific wage rate for each occupation, which includes a fringe-benefit rate of 29.9 percent of total compensation⁴, is provided as follows:

⁴This fringe-benefit rate comes from the total benefits percentage for private industry from *Employer Costs for Employee Compensation*, March 2013, U.S. Department of Labor, Bureau of Labor Statistics, p. 3, Table A.

- Supervisor/professional⁵: \$36.32
- Non-supervisory worker⁶: \$21.55
- Secretary⁷: \$20.95
- Industrial Hygienist⁸: \$41.71

Number of Workers

In the 2002 ICR, OSHA estimated there were 118,847 total workers in NAICS 331111 (Iron and Steel Mills), of which 4,933 (approximately 4.15% of 118,847) were employed in facilities producing “coke oven and blast furnace products” (NAICS 331111). Further, of these 4,933 workers, an estimated 4,167 (84.5% of 4,933) were employed in production capacities.⁹ In 2011, there were a total of 99,218 workers employed in NAICS 331111.¹⁰ Applying the ratios from the 2002 ICR, this suggests a current total workforce of 4,118 and production workforce of 3,480 employed in coke oven and blast furnace production capacities.

Burden-Hour and Cost Determinations

The following sections summarize the methodology used for estimating the number of burden hours and cost resulting from the information collection requirements of the COE Standard. Attached to the supporting statement is Table 1 **Change in Burden Hours**. This Table explains the reasons for change in burden hours for each of the following collection of information requirements.

⁵This mean hourly wage rate corresponds to SOC code 51-1011, “First-Line Supervisors/Managers of Production and Operating Workers.” (Source: *May 2013 National Occupational Employment and Wage Estimates, United States*, U.S. Department of Labor, Bureau of Labor Statistics.)

⁶This mean hourly wage rate corresponds to SOC code 51-0000, “Production Occupations.” (Source: *May 2013 National Occupational Employment and Wage Estimates, United States*, U.S. Department of Labor, Bureau of Labor Statistics.)

⁷This mean hourly wage rate corresponds to SOC code 43-6014, “Secretaries, Except Legal, Medical, and Executive.” (Source: *May 2013 National Occupational Employment and Wage Estimates, United States*, U.S. Department of Labor, Bureau of Labor Statistics.)

⁸This mean hourly wage rate corresponds to SOC code 29-9011, “Occupational Health and Safety Specialists.” (Source: *May 2013 National Occupational Employment and Wage Estimates, United States*, U.S. Department of Labor, Bureau of Labor Statistics.)

⁹ Source: U.S. Census Bureau, 2002 Economic Census, Manufacturing Industry Series: Iron and Steel Mills: 2002 (EC02-311-331111 RV), issued December 2004; <http://www.census.gov/prod/ec02/ec0231i331111.pdf> <http://censtats.census.gov/cgi-bin/cbpnaic/cbpdetl.pl>

¹⁰ Source: U.S. Census Bureau, 2012 County Business Patterns Survey: NAICS 331111 (Iron and Steel Mills). <http://censtats.census.gov/cgi-bin/cbpnaic/cbpdetl.pl>. (Note 2012 County Business Patterns (NAICS) is the web site, please change year to 2011 and search NAICS 331111)

(A) Exposure-monitoring and Measurement (§ 1910.1029(e)(1))

1. Monitoring Program (§ 1910.1029(e)(1))

Employers must monitor worker exposure to COE in regulated areas. In doing so, they must collect full-shift (i.e., at least 7 continuous hours) personal samples, including at least 1 sample during each shift for each battery and each job classification listed in paragraph 1910.1029(e)(iii) of the Standard. In the 2009 ICR, OSHA estimated that there were 20 plants covered by the Standard which had a total of 58 batteries (an assumption of 2.9 batteries per plant).¹¹ For this ICR, OSHA estimates that there are 19 plants covered by the Standard which have a total of 55 batteries.¹²

Employers must repeat exposure-monitoring four times a year (once a quarter). Each battery operates three shifts daily with an average of 16 job classifications per shift; and an industrial hygienist on the plant staff takes four hours to collect and analyze each exposure-monitoring sample using equipment and materials available at the plant. Assuming the increase in batteries represents new production, initial exposure monitoring would also be conducted at each of the 3 new batteries. OSHA assumes that all workers in the new batteries are in regulated areas, and the initial monitoring is one of the quarterly monitoring instances required by the Standard.

Burden hours: 55 batteries x 16 job classifications/battery x 3 shifts x 4 samples/year x 4 hours/sample = 42,240 hours

Cost: 42,240 hours x \$41.71/hour = \$1,761,830

2. Redetermination (§ 1910.1029(e)(2))

Employers must perform additional monitoring if: a change occurs in COE-related production, processes, or controls that may result in new or additional exposure; or the employer has any reason to suspect an increase in worker exposure to COE. OSHA assumes that employers will conduct additional monitoring in 5% of the batteries once a year.

Burden hours: 55 batteries x .05 x 16 job classifications/battery x 3 shifts x 4 hours/sample = 528 hours

Cost: 528 hours x \$41.71/hour = \$22,023

¹¹Source: American Coke and Coal Chemicals Institute, *Operating U.S. Coke Plants*. Data as of April 24, 2006. [http://www.accci.org/Coke_Plant_Listing.pdf]. David C. Ailor, Director of Regulatory Affairs, American Coke and Coal Chemicals Institute. *Principal Environmental Issues Facing the U.S. Coke Industry in 2003*. Presented October 8, 2003 [<http://www.accci.org/Ailor.pdf>].

¹²Source: American Coke and Coal Chemicals Institute, *U.S. & Canadian Coke Plants*, as of January 1, 2012. [http://accci.org/documents/CokePlantListing_010112.pdf]

3. Notification of Workers (§ 1910.1029(e)(3))

Employers must notify each worker of their exposure measurements within 15 days after receipt of the results either individually with a written copy of their results or by posting the result in an appropriate location that is accessible to the worker. OSHA assumes the 19 plants would prefer to post the workers' results in a readily accessible location. OSHA estimates that a secretary would take 5 minutes (0.08 hour) to post the monitoring results.

Burden hours: 19 plants x 4 times per year x .08 hour = 6 hours

Cost: 6 hours x \$20.95 = \$126

(B) Compliance Program (§ 1910.1029 (f)(6))

Employers must establish and implement a written program to reduce worker exposures to or below the PEL using engineering or work-practice controls, and review these programs at least annually and revise them as needed if exposures remain above the PEL.

OSHA assumes there has been one new COE facility over the past three years. The Agency will take burden hours for newly identified coke COE facilities to prepare a compliance program. For purposes of calculating burden hours, OSHA assumes that each newly identified plant will have some workers exposed above PEL. OSHA estimates a supervisor would expend 8 hours and a clerical 4 hours to develop the compliance plans for a total of 12 hours per newly identified plant.

Burden hours: 1 newly identified plant x 12 hours = 12 hours

Cost: 12 x [(\$36.32 x 8) + (\$20.95 x 4)] = \$4,492

The Agency assumes, however, that each of the remaining 19 plants covered by the Standard has some workers exposed above the PEL, and that these employers must review and revise their compliance programs annually. OSHA estimates that a supervisor can update a plan in 2 hours, and that a secretary will spend 1 hour preparing a plan.

Burden hours: 19 plants x 1 (annually) x 3 hours = 57 hours

Cost: 19 plants x 1 (annually) x ((2 supervisor hours x \$36.32) + (1 secretary x \$20.95 hour)) = \$1,778

(C) Respiratory Protection (§ 1910.1029(g))

The Standard requires employers to implement a respiratory-protection program in accordance with the provisions of OSHA's Respiratory Protection Standard (29 CFR 1910.134). The burden for this requirement is taken under the ICR for the Respiratory Protection Standard, OMB Control Number 1218-0099.

(D) Notification of Laundry personnel (§ 1910.1029 (h)(2)(vi))

Employers must notify laundry personnel who clean or launder protective clothing of the potential hazards of COE exposure. OSHA assumes that each employer (or plant) would provide this notification in writing once a year, and that a secretary would take 5 minutes (.08 hour) to type and deliver the notice.

Burden hours: 19 employers x 1 notification/year x .08 hour = 2 hours
Cost: 2 hours x \$20.95= \$42

(E) Medical Surveillance (§ 1910.1029(j))

1. General (§ 1910.1029(j)(1), (j)(2), and (j)(3))

Paragraph (j)(1)(ii) requires that the employer inform any worker who refuses any medical examination of possible health consequences of such refusal and obtain a signed statement from the worker indicating that the worker understands the risk involved in the refusal to be examined.

OSHA estimates there are 3,480 covered workers¹³ that may receive medical examinations. Assuming an annual separation rate of 33.2%, OSHA estimates a total of 1,155 new workers would be offered the option of receiving medical surveillance. For purposes of calculating burden hours and costs, the Agency believes no more than 1% would refuse to participate in COE medical surveillance program. OSHA estimates it would take a supervisor 30 minutes (.5 hour) to explain the possible medical consequences of a worker not participating, and to obtain the workers signed statement that they understand the consequences of not participating in the medical surveillance program.

Burden hours: 12 non-participants x .5 hour = 6 hours
Cost: 6 hours x \$36.32 = \$218

All covered workers receive annual examinations as specified in paragraphs (j)(2)(i) – (vi). For workers 45 years of age or older, or for workers with 5 or more years employment in regulated areas, they receive an additional urinary cytology examination ((j)(2)(vii)). The additional time for this test is negligible. Given the previous assumption that 12 workers may choose not to participate in the medical surveillance program, the Agency estimates 3,468 workers will receive annual medical examinations.

Also, OSHA estimates that 16.6% of the 3,468 workers receiving annual medical examinations (576) will require additional medical examinations. These examinations are administered if a worker has not had an examination within six months. The total number of medical examinations is 4,044.

The burden hours for medical examinations represents the time a worker is away from the job.

¹³Covered workers are workers who are employed in a regulated area at least 30 days per year.

For the examinations administered under this Standard, the Agency estimates that a worker will be away from the job 1 hour and 40 minutes (1.67 hours).

Burden hours: 4,044 workers x 1.67 hour = 6,754 hours
Cost: 6,754 hours x \$21.55 = \$145,549

2. Information Provided to the Physician (§ 1910.1029(j)(4))

Employers must provide the examining physician with specific information on each worker who receives a medical examination. The Agency assumes that, for each medical examination administered to a covered worker, it takes a secretary (at a wage rate of \$20.95 per hour) 5 minutes (.08 hour) to compile the required information and deliver it to the physician. Based on the analysis performed under "General" above, this Standard requires 4,044 medical examinations.

Burden hours: 4,044 examinations x .08 hour = 324 hours
Cost: 324 hours x \$20.95 = \$6,788

3. Physician's Written Opinion (§ 1910.1029(j)(5))

Employers must provide a copy of the physician's written opinion to each worker who receives a medical examination. OSHA assumes that a secretary will take 5 minutes (.08 hour) to deliver a copy of the physician's written opinion to each covered worker. Based on the analysis performed under "Information provided to the Physician" above, 4,044 medical examinations will be administered each year, resulting in the same number of opinions that must be delivered to covered workers.

Burden hours: 4,044 examinations x .08 hour = 324 hours
Cost: 324 hours x \$20.95 = \$6,788

(F) Employee Information and Training (§ 1910.1029(k))

The Standard's training requirements are not considered collection of information requirements; therefore, no burden hours are incurred from this provision.

(G) Precautionary Signs and Labels (§ 1910.1029(l))

The Standard requires employers to post warning signs in regulated areas. In addition, employers must apply warning labels to all containers housing COE-contaminated protective clothing. The Standard provides specific language for the required signs and labels; therefore no burden has been taken for this provision because OSHA is providing the required information. (See the final rule entitled "Controlling Paperwork Burden on the Public," 5 CFR 1320.3(c)(2)).

(H) Recordkeeping (§ 1910.1029(m))

1. Exposure Measurement (§ 1910.1029 (m)(1))

Employers must establish and maintain accurate records of all exposure-monitoring measurements taken to determine worker exposure to COE. If each of 3,480 covered workers receives 4 periodic exposure-monitoring records each year (3,480 workers x 4 measurements/year = 13,920 records), and 5% of these workers receive 1 redetermination each year (3,480 workers x 5% x 1 measurement/year = 174 records), the total number of records generated each year is 14,094 records. OSHA estimates that a secretary will take 5 minutes (.08 hour) to establish, update, and maintain each of these records.

Burden hours: 14,094 records x .08 hour = 1,128 hours

Cost: 1,128 hours x \$20.95 = \$23,632

2. Medical Surveillance (§ 1910.1029(m)(2))

As noted in the analysis conducted under “Information provided to the Physician” above, each year covered workers receive 4,044 medical examinations, resulting in the same number of medical records. OSHA estimates that a secretary would spend 5 minutes (.08 hour) establishing, updating, and maintaining each of these records.

Burden hours: 4,044 examinations x .08 hour = 324 hours

Cost: 324 hours x \$20.95 = \$6,788

3. Availability (§ 1910.1029(m)(3) and § 1910.1029(k)(2))

Employers must provide, on request, all records required by the Standard to OSHA and NIOSH for examination and copying. In addition, employers must provide worker medical and exposure-monitoring records to workers and worker representatives on request. Training materials must also be made available to workers employed in the regulated areas, OSHA, and NIOSH.

The Agency assumes that 10% of the covered workers (3,480 workers x 10% = 348 workers), which includes their designated representatives, will request access to medical, exposure-monitoring, or training materials each year. OSHA estimates that it will take a secretary 15 minutes (.25 hour) to make the records available to these workers.

Burden hours: 348 workers x .25 hour = 87 hours

Cost: 87 hours x \$20.95 = \$1,823

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

- **The cost estimate should be split into two components: (a) a total capital and start-up cost component (annualized over its expected useful life) and (b) a total operation and maintenance and purchase of services component. The estimates should take into account costs associated with generating, maintaining, and disclosing or providing the information. Include descriptions of methods used to estimate major cost factors including system and technology acquisition, expected useful life on 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 collections services should be part of this cost burden estimate. In developing cost burden estimates, agencies may consult with a sample of respondents (fewer than 10), utilize the 60-day pre-OMB submission public comment process and use existing economic or regulatory impact analysis associated with the rulemaking containing the information collection, as appropriate.**
- **Generally, estimates should not include purchases of equipment or services, or portions thereof, made: (1) prior to October 1, 1995, (2) to achieve regulatory compliance with requirements not associated with the information collection, (3) for reasons other than to provide information or keep records for the government, or (4) as part of customary and usual business or private practices.**

Medical Surveillance

Based on the analysis performed in the Medical Surveillance "General" above, OSHA estimates 4,044 medical examinations will be performed. Each medical examination would include the following: basic medical examination costing \$154.25; which includes the urinary cytology and one x-ray costing \$64.54. The total cost per examination is \$218.79.¹⁴

Cost: 4,044 medical examinations x \$218.79 = \$884,787

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 may also aggregate cost estimates from Items 12, 13, and 14 in a single table.

OSHA does not take costs for occupational expenses, such as equipment, overhead, and support staff expenses, since these costs are normal operating expenses and would have occurred without these collections of information requirements. Information collected and reviewed by the Agency during the inspection is not subject to the PRA under 5 CFR 1320.4(a)(2). Therefore, there are no costs for OSHA to review employers records during an inspection.

¹⁴The previous ICR assumed that each medical examination would include the following: basic medical examination costing \$144.56; which includes the urinary cytology and one x-ray costing \$60.49. The total cost per examination was \$205.05. The Consumer Price Index indicated a 6.7% increase in the price of professional medical services from December 2011 to 2014; the cost of a medical examination was assumed to have increased by 6.7% as well. Source: *CPI Detailed Report - February 2014* (<http://www.bls.gov/cpi/cpid1402.pdf>.)

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

The Agency is requesting an adjustment decrease of 2,449 burden hours (from 54,241 hours to 51,792). The adjustment decrease is due to a decrease in the number of identified batteries that are subject to the Standard. Table 1, *Change in Burden Hours*, shows the changes in burden hours in detail by provision.

In addition, although there was a decrease in the number of workers and medical examinations, there was a \$45,107 increase in the cost under Item 13 from \$839,680 to \$884,787 as result of an increase in the cost of a medical examination.

Upon further consideration, information collected by the Agency during the inspection is not subject to the PRA under 5 CFR 1320.4(a)(2). Therefore, OSHA takes no burden or cost for disclosure of records to OSHA during an inspection in Items 12 and 14 of this Supporting Statement.

16. For collection 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 of information, completion of report, publication dates, and other actions.

The information collected under the COE Standard will not be published.

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

OSHA lists current valid control numbers in §§1910.8, 1915.8, 1917.4, 1918.4, and 1926.5 and publishes the expiration date in the Federal Register notice announcing OMB approval of the information collection requirement. (See 5 CFR 1320.3(f)(3).) OSHA believes that this is the most appropriate and accurate mechanism to inform interested parties of these expiration dates.

18. Explain each exception to the certification statement.

OSHA is not seeking an exception to the certification statement.

B. COLLECTIONS OF INFORMATION EMPLOYING STATISTICAL METHODS

These collection of information requirements employ no statistical methods.

Attachment:

Table 1
Change in Burden Hours

Information Collection Requirements	Responses	Existing Burden Hours	Proposed Burden Hours	Change Adjustment	Reason for Adjustment
(A) Exposure-monitoring and Measurement					
1. Monitoring Program	10,560	44,544	42,240	-2,304	Based on updated data, the number of batteries decreased from 58 to 55.
2. Redetermination	132	557	528	-29	Based on updated data, the number of batteries decreased from 58 to 55.
3. Employee Notification	76	6	6	0	No change.
(B) Compliance Program	20	72	69	-3	The number of newly identified plants to develop initial programs remained at 1. The number of plants reviewing plans decreased from 20 to 19.
(C) Respiratory Protection	0	0	0	0	No change.
(D) Notification to Laundry Personnel	19	2	2	0	No change. As a result of the decrease in plants from 20 to 19.
(E) Medical Surveillance					
1. General	4,056	6,845	6760	-85	The decrease in burden hours is a result of updated data from 2011County Business Patterns suggesting a decrease in the number of production workforce workers, from 3,524 to 3,480
2. Information Provided to the Physician	4,044	328	324	-4	The number of medical examinations decreased from 4,095 to 4,044.
3. Physician's Written Opinion	4,044	328	324	-4	See above.

(F) Employee Information and Training	0	0	0	0	No change.
(G) Precautionary Signs and Labels	0	0	0	0	No change.
(H) Recordkeeping					
1. Exposure Measurement	13,920	1,142	1,128	-14	As a result of fewer workers being monitored, the number of individual worker exposure records decreased from 4,272 to 13,920.
2. Medical Surveillance	4,044	328	324	-4	As a result of fewer workers receiving medical examinations, the number of medical examinations decreased from 4,095 to 4,044..
3. Availability	348	89	87	-2	As a result of fewer workers being monitored and receiving medical examinations, the number requesting access decreased from 352 to 348.
TOTAL	41,263	54,241	51,792	-2,449	

