

ASBESTOS IN GENERAL INDUSTRY STANDARD
1218-0133
May 2019

Note

OSHA has completed a regulatory review of its existing safety and health standards in response to the President's Executive Order 13563, "Improving Regulation and Regulatory Review" (76 FR 3821). This review, the Standards Improvement Project-Phase IV (SIP-IV), was the fourth in a series of rulemaking actions to improve and streamline OSHA standards. OSHA's Standards Improvement Projects remove or revise individual requirements in safety and health standards that are confusing, outdated, duplicative or inconsistent. The goal of this rulemaking was to reduce regulatory burden while maintaining or enhancing worker safety and health.

As part of the SIP-IV rulemaking, the Agency updated the chest x-ray requirements for several of its standards, including the Asbestos standard for general industry, 29 CFR 1910.1001, by adding the option of digital radiography to its existing standards because digital radiography systems are rapidly replacing traditional analog film-based systems in medical facilities. OSHA also removed the provisions in its standards, including Asbestos in general industry, that require employers to collect and record employees' social security numbers. Finally, the Agency revised several forms from older standards, including a form contained in Appendix D of the Asbestos standard for general industry, to comport with OMB's Standards for Maintaining, Collecting, and Presenting Federal Data on Race and Ethnicity, as updated on October 30, 1997 (62 FR 58782-58790).

This ICR seeks OMB approval for changes to the collection in accordance with the SIP-IV Final Rule. As noted above and described in more detail in this ICR, the SIP-IV Final Rule is expected to reduce the paperwork burden borne by employers.

**SUPPORTING STATEMENT FOR THE
INFORMATION COLLECTION REQUIREMENTS OF THE
ASBESTOS IN GENERAL INDUSTRY STANDARD (29 CFR 1910.1001)¹
OFFICE OF MANAGEMENT AND BUDGET (OMB)
Control No. 1218-0133 (May 2019)**

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) 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 regulations” (29 U.S.C. 651).

To protect employee health, the OSH Act authorizes the Occupational Safety and Health Administration (OSHA) 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 in order to most effectively determine whether the health of such employees is adversely affected by such exposure” (29 U.S.C. 655). 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). In addition, the OSH Act directs OSHA to “issue 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 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). The OSH 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

¹The purpose of this supporting statement is to analyze and describe the burden hours and costs associated with provisions of the Asbestos in General Industry Standard that contain collections of information; this supporting statement does not provide information or guidance on how to comply with, or how to enforce, the Standard.

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employer's establishment" (29 U.S.C. 651).

Under the authority granted by the OSH Act, OSHA published a General Industry health standard at 29 CFR 1910.1001 regulating employee exposure to asbestos (the "Standard"). The basis for this Standard is a determination by the Assistant Secretary for OSHA that occupational exposure to asbestos poses a hazard to employees. Years of exposure to asbestos can cause numerous disabling or fatal diseases. Among these diseases are asbestosis, an emphysema-like condition; lung cancer; mesothelioma, a cancerous tumor that spreads rapidly in the cells of membranes covering the lungs and body organs; and gastrointestinal cancer. Items 2 and 12 below describe the specific information collection requirements of the Standard.

2. Indicate how, by whom, and for what purpose the information is to be used. Except for a new collection, indicate the actual use the agency has made of the information received from the current collection.

The following are the collection of information requirements as stated in the Standard, followed by discussions indicating how, by whom, and for what purpose the information is used for each of these requirements.

A. Exposure monitoring (§1910.1001(d))

General (§1910.1001(d)(1)) - Determinations of employee exposure shall be made from breathing zone air samples that are representative of the 8-hour TWA and 30-minute short-term exposures of each employee.

§1910.1001(d)(1)(ii) - Representative 8-hour TWA employee exposures shall be determined on the basis of one or more samples representing full-shift exposures for each shift for each employee in each job classification in each work area. Representative 30-minute short-term employee exposures shall be determined on the basis of one or more samples representing 30 minute exposures associated with operations that are most likely to produce exposures above the excursion limit for each shift for each job classification in each work area.

Initial monitoring (§1910.1001(d)(2))

§1910.1001(d)(2)(i) - Each employer who has a workplace or work operation covered by this standard, except as provided for in paragraphs (d)(2)(ii) and (d)(2)(iii) of this section, shall perform initial monitoring of employees who are, or may reasonably be expected to be exposed to airborne concentrations at or above the TWA permissible exposure limit and/or excursion limit.

§1910.1001(d)(2)(iii) - Where the employer has relied upon objective data that

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demonstrate that asbestos is not capable of being released in airborne concentrations at or above the TWA permissible exposure limit and/or excursion limit under the expected conditions of processing, use, or handling, then no initial monitoring is required.

Purpose: Employers must perform initial monitoring to determine the extent of asbestos exposure in their workplace. Initial monitoring allows employers to identify areas of operation that may require additional reduction in airborne asbestos to meet the permissible exposure level (PEL). The results of initial exposure-monitoring also assist employers in determining the need for engineering controls, implementing or modifying work practices, and selecting appropriate respiratory protection to prevent workers from overexposure to asbestos.

Monitoring frequency (periodic monitoring) and patterns (§1910.1001(d)(3)) - After the initial determinations required by paragraph (d)(2)(i) of this section, samples shall be of such frequency and pattern as to represent with reasonable accuracy the levels of exposure of the employees. In no case shall sampling be at intervals greater than six months for employees whose exposures may reasonably be foreseen to exceed the TWA permissible exposure limit and/or excursion limit.

Purpose: Periodic monitoring allows employers to determine the effects of implemented controls, modifications in process, materials, or environmental conditions on worker exposures to asbestos.

Additional monitoring (§1910.1001(d)(5)) - Notwithstanding the provisions of paragraphs (d)(2)(ii) and (d)(4) of this section, the employer shall institute the exposure monitoring required under paragraphs (d)(2)(i) and (d)(3) of this section whenever there has been a change in the production, process, control equipment, personnel or work practices that may result in new or additional exposures above the TWA permissible exposure limit and/or excursion limit or when the employer has any reason to suspect that a change may result in new or additional exposures above the PEL and/or excursion limit.

Purpose: Changes in production process, chemicals present, control equipment, and new personnel may lead to increases in worker exposure levels. Additional monitoring is necessary so that the employer takes action to protect workers, such as providing appropriate respiratory equipment or instituting engineering controls. Additional monitoring ensures that the work area is safe, or alerts the employer to the need to increase worker protection.

Method of monitoring (§1910.1001(d)(6))

§1910.1001(d)(6)(iii)(c) - The equivalent method is documented and the results of the comparison testing are maintained.

Notification of monitoring results (§1910.1001(d)(7))

§1910.1001(d)(7)(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 affected employees.

§1910.1001(d)(7)(ii) - The written notification required by paragraph (d)(7)(i) of this section shall contain the corrective action being taken by the employer to reduce employee exposure to or below the TWA and/or excursion limit, wherever monitoring results indicated that the TWA and/or excursion limit had been exceeded.

Purpose: Consistent with section 8(c)(3) of the Act, every worker has the right to know what their exposure level is and whether it is above or below the AL. Moreover, since the PEL is one that also considers feasibility and, therefore, is not necessarily a “safe” level, it is necessary for the workers to know the level of asbestos to which they were exposed.

Additionally, when exposures are above the PEL, the employer must also state in the notification what corrective action the employer is going to take to reduce the exposure level. This requirement is necessary to assure workers that the employer is making every effort to furnish them with a safe and healthful work environment and implementing section 8(c)(3) of the OSH Act.

B. Compliance Program (§1910.1001(f))

Methods of compliance (§1910.1001(f)(2))

§1910.1001(f)(2)(i) - Where the TWA and/or excursion limit is exceeded, the employer shall establish and implement a written program to reduce employee exposure to or below the TWA and to or below the excursion limit by means of engineering and work practice controls as required by paragraph (f)(1) of this section, and by the use of respiratory protection where required or permitted under this section.

§1910.1001(f)(2)(ii) - Such programs shall be reviewed and updated as necessary to reflect significant changes in the status of the employer's compliance program.

§1910.1001(f)(2)(iii) - Written programs shall be submitted upon request for examination and copying to the Assistant Secretary, the Director², affected employees and designated employee representatives.

² “Director” means the Director of the National Institute for Occupational Safety and Health, U.S. Department of Health and Human Services, or designee.

Specific compliance methods for brake and clutch repair (§1910.1001(f)(3))

§1910.1001(f)(3)(i) - Engineering controls and work practices for brake and clutch repair and service. During automotive brake and clutch inspection, disassembly, repair and assembly operations, the employer shall institute engineering controls and work practices to reduce employee exposure to materials containing asbestos using a negative pressure enclosure/HEPA vacuum system method or low pressure/wet cleaning method, which meets the detailed requirements set out in Appendix F to this section. The employer may also comply using an equivalent method which follows written procedures which the employer demonstrates can achieve results equivalent to Method A in Appendix F to this section. For facilities in which no more than 5 pair of brakes or 5 clutches are inspected, disassembled, repaired, or assembled per week, the method set forth in paragraph [D] of Appendix F to this section may be used.

§1910.1001(f)(3)(ii) - The employer may also comply by using an equivalent method which follows written procedures, which the employer demonstrates can achieve equivalent exposure reductions as do the two "preferred methods." Such demonstration must include monitoring data conducted under workplace conditions closely resembling the process, type of asbestos containing materials, control method, work practices and environmental conditions which the equivalent method will be used, or objective data, which document that under all reasonably foreseeable conditions of brake and clutch repair applications, the method results in exposures which are equivalent to the methods set out in Appendix F to this section.

Purpose: Requiring employers to develop written engineering and work practice control procedures that are equivalent to Method A in Appendix F, ensures employers and workers take necessary steps to avoid asbestos exposure. The written procedure serves to remind employers to continue to maintain exposure-control methods that are equivalent to Appendix F.

C. Respiratory protection (§1910.1001(g))

§1910.1001(g)(1) - General. For employees who use respirators required by this section, the employer must provide each employee an appropriate respirator that complies with the requirements of this paragraph. Respirators must be used during:

§1910.1001(g)(1)(i) - Periods necessary to install or implement feasible engineering and work-practice controls.

§1910.1001(g)(1)(ii) - Work operations, such as maintenance and repair activities, for which engineering and work-practice controls are not feasible.

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§1910.1001(g)(1)(iii) - Work operations for which feasible engineering and work-practice controls are not yet sufficient to reduce employee exposure to or below the TWA and/or excursion limit.

§1910.1001(g)(1)(iv) - Emergencies.

Respiratory program (§1910.1001(g)(2)(i)) - The employer must implement a respiratory protection program in accordance with 29 CFR [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: OSHA's Respiratory Protection Standard assists employers in protecting the health of workers exposed to airborne contaminants and biological agents that they find infeasible to control at the required level using work practice and engineering methods.

D. Protective work clothing and equipment (§1910.1001(h))

Removal and storage (§1910.1001(h)(2)(iv)) - The employer shall ensure that containers of contaminated protective devices or work clothing, which are to be taken out of change rooms or the workplace for cleaning, maintenance or disposal, bear labels in accordance with paragraph (j) of this section.

Changing Replacement (§1910.1001(h)(3))

§1910.1001(h)(3)(iv) - Any employer who gives contaminated clothing to another person for laundering shall inform such person of the requirement in paragraph (h)(3)(iii) of this section to effectively prevent the release of airborne fibers of asbestos in excess of the permissible exposure limits.

§1910.1001(h)(3)(v) - The employer shall inform any person who launders or cleans protective clothing or equipment contaminated with asbestos of the potentially harmful effects of exposure to asbestos.

§1910.1001(h)(3)(vi) - The employer shall ensure that contaminated clothing is transported in sealed impermeable bags, or other closed, impermeable containers, and labeled in accordance with paragraph (j) of this section.

Purpose: The information provided by employers under this provision will protect personnel who may come in contact with asbestos contaminated clothing from the hazards associated with asbestos exposure.

E. Communication of hazards to employees (§1910.1001(j))

Hazard communication – general (§1910.1001(j)(1))

§1910.1001(j)(1)(i) - Chemical manufacturers, importers, distributors and employers shall comply with all requirements of the Hazard Communication Standard (HCS) (Sec. 1910.1200) for asbestos.

§1910.1001(j)(1)(iii) - Employers shall include asbestos in the hazard communication program established to comply with the HCS (Sec. 1910.1200). Employers shall ensure that each employee has access to labels on containers of asbestos and to safety data sheets, and is trained in accordance with the requirements of HCS and paragraph (j)(7) of this section.

Employers who are manufacturers or importers of asbestos or asbestos products must comply with the requirements regarding development of safety data sheets and hazard communication programs as specified in the OSHA Hazard Communication Standard. Because these hours are already included in the hazard communication ICR (OMB Control No. 1218-0072), no hours are assumed in this package. The collections of information for the labels and training required by the HCS as it pertains to asbestos in general industry are addressed in this Supporting Statement.

Duties of employers and building and facility owners (§1910.1001(j)(3))

§1910.1001(j)(3)(i) - Building and facility owners shall determine the presence, location, and quantity of ACM and/or PACM at the work site. Employers and building and facility owners shall exercise due diligence in complying with these requirements to inform employers and employees about the presence and location of ACM and PACM.

§1910.1001(j)(3)(ii) - Building and facility owners shall maintain records of all information required to be provided pursuant to this section and/or otherwise known to the building owner concerning the presence, location and quantity of ACM and PACM in the building/facility. Such records shall be kept for the duration of ownership and shall be transferred to successive owners.

§1910.1001(j)(3)(iii) - Building and facility owners shall inform employers of employees, and employers shall inform employees who will perform housekeeping activities in areas which contain ACM and/or PACM of the presence and location of ACM and/or PACM in such areas which may be contacted during such activities.

Warning signs (§1910.1001(j)(4))

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§1910.1001(j)(4)(i) – Posting. Warning signs shall be provided and displayed at each regulated area. In addition, warning signs shall be posted at all approaches to regulated areas so that an employee may read the signs and take necessary protective steps before entering the area.

§1910.1001(j)(4)(ii)(A) - The warning signs required by paragraph (j)(4)(i) of this section shall bear the following information:

DANGER
ASBESTOS
MAY CAUSE CANCER
CAUSES DAMAGE TO LUNGS
AUTHORIZED PERSONNEL ONLY

§1910.1001(j)(4)(ii)(B) - In addition, where the use of respirators and protective clothing is required in the regulated area under this section, the warning signs shall include the following:

WEAR RESPIRATORY PROTECTION AND
PROTECTIVE CLOTHING IN THIS AREA

§1910.1001(j)(4)(ii)(C) - Prior to June 1, 2016, employers may use the following legend in lieu of that specified in paragraph (j)(4)(ii)(A) of this section:

DANGER
ASBESTOS
CANCER AND LUNG DISEASE
HAZARD
AUTHORIZED PERSONNEL ONLY

§1910.1001(j)(4)(ii)(D) - Prior to June 1, 2016, employers may use the following legend in lieu of that specified in paragraph (j)(4)(ii)(B) of this section:

RESPIRATORS AND PROTECTIVE CLOTHING
ARE REQUIRED IN THIS AREA

§1910.1001(j)(4)(iv) - At the entrance to mechanical rooms/areas in which employees reasonably can be expected to enter and which contain ACM and/or PACM, the building owner shall post signs which identify the material which is present, its location, and appropriate work practices which, if followed, will ensure that ACM and/or PACM will

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not be disturbed. The employer shall ensure, to the extent feasible, that employees who come in contact with these signs can comprehend them. Means to ensure employee comprehension may include the use of foreign languages, pictographs, graphics, and awareness training.

Purpose: These signs alert 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. The signs, therefore, warn workers that they are in or near a hazardous area, and supplement the hazard-recognition training workers receive under the Standard.

Warning labels (§1910.1001(j)(5))

§1910.1001(j)(5)(i) - Labeling. Labels shall be affixed to all raw materials, mixtures, scrap, waste, debris, and other products containing asbestos fibers, or to their containers. When a building owner or employer identifies previously installed ACM and/or PACM, labels or signs shall be affixed or posted so that employees will be notified of what materials contain ACM and/or PACM. The employer shall attach such labels in areas where they will clearly be noticed by employees who are likely to be exposed, such as at the entrance to mechanical room/areas. Signs required by paragraph (j) of this section may be posted in lieu of labels so long as they contain the information required for labeling.

§1910.1001(j)(5)(ii) - Label specifications. In addition to the requirements of paragraph (j)(1), the employer shall ensure that labels of bags or containers of protective clothing and equipment, scrap, waste, and debris containing asbestos fibers include the following information:

DANGER
CONTAINS ASBESTOS FIBERS
MAY CAUSE CANCER
CAUSES DAMAGE TO LUNGS
DO NOT BREATHE DUST
AVOID CREATING DUST

§1910.1001(j)(5)(iii) - Prior to June 1, 2015, employers may include the following information on raw materials, mixtures or labels of bags or containers of protective clothing and equipment, scrap, waste, and debris containing asbestos fibers in lieu of the labeling requirements in paragraphs (j)(1)(i) and (j)(5)(ii) of this section:

DANGER
CONTAINS ASBESTOS FIBERS

AVOID CREATING DUST
CANCER AND LUNG DISEASE HAZARD

Purpose: Warning labels inform downstream employers and workers of the hazards associated with asbestos, and that they may need to implement special practices to prevent exposure to the substance. It also reminds both the employer and workers of the continuing need to protect against the hazards that could result from worker overexposure.

Furthermore, hazard labels alert other employers who, in the absence of such labels, may not know that asbestos is present in their workplace and, consequently, that they must comply with the Standard.

Employee information and training (§1910.1001(j)(7))

§1910.1001(j)(7)(i) - The employer shall train each employee who is exposed to airborne concentrations of asbestos at or above the PEL and/or excursion limit in accordance with the requirements of this section. The employer shall institute a training program and ensure employee participation in the program.

§1910.1001(j)(7)(ii) - Training shall be provided prior to or at the time of initial assignment and at least annually thereafter.

§1910.1001(j)(7)(iii) - The training program shall be conducted in a manner which the employee is able to understand. The employer shall ensure that each employee is informed of the following:

§1910.1001(j)(7)(iii)(A) - The health effects associated with asbestos exposure;

§1910.1001(j)(7)(iii)(B) - The relationship between smoking and exposure to asbestos producing lung cancer;

§1910.1001(j)(7)(iii)(C) - The quantity, location, manner of use, release, and storage of asbestos, and the specific nature of operations which could result in exposure to asbestos;

§1910.1001(j)(7)(iii)(D) - The engineering controls and work practices associated with the employee's job assignment;

§1910.1001(j)(7)(iii)(E) - The specific procedures implemented to protect employees from exposure to asbestos, such as appropriate work practices, emergency and clean-up procedures, and personal protective equipment to be used;

§1910.1001(j)(7)(iii)(F) - The purpose, proper use, and limitations of respirators and

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protective clothing, if appropriate;

§1910.1001(j)(7)(iii)(G) - The purpose and a description of the medical surveillance program required by paragraph (l) of this section;

§1910.1001(j)(7)(iii)(H) - The content of this Standard, including appendices.

§1910.1001(j)(7)(iii)(I) - The names, addresses and phone numbers of public health organizations which provide information, materials, and/or conduct programs concerning smoking cessation. The employer may distribute the list of such organizations contained in appendix I to this section, to comply with this requirement.

§1910.1001(j)(7)(iii)(J) - The requirements for posting signs and affixing labels and the meaning of the required legends for such signs and labels.

§1910.1001(j)(7)(iv) - The employer shall also provide, at no cost to employees who perform housekeeping operations in an area which contains ACM or PACM, an asbestos awareness training course, which shall at a minimum contain the following elements: health effects of asbestos, locations of ACM and PACM in the building/facility, recognition of ACM and PACM damage and deterioration, requirements in this Standard relating to housekeeping, and proper response to fiber release episodes, to all employees who perform housekeeping work in areas where ACM and/or PACM is present. Each such employee shall be so trained at least once a year.

The requirement that employers provide training to workers under paragraph (j)(7) is not considered to be a collection of information. Therefore, OSHA does not take burden for this activity under Item 12 of this Supporting Statement.

Purpose: Training is essential to inform workers of the health hazards of asbestos exposure, and to provide them with the understanding required to minimize these health hazards. In addition, training provides information to workers that enable them to recognize how and where asbestos exposure occurs, and what steps to take, including work practices, to avoid or limit such exposure. Another benefit of training is that it serves to explain and reinforce the information presented to workers on warning signs and labels. In this regard, workers must understand the information, and be aware of the actions they must take to avoid or minimize asbestos exposure.

F. Medical surveillance (§1910.1001(l))

Employers Covered General (§1910.1001(l)(1)) - The employer shall institute a medical surveillance program for all employees who are or will be exposed to airborne concentrations of fibers of asbestos at or above the TWA and/or excursion limit.

Pre-placement examinations (§1910.1001(l)(2))

§1910.1001(l)(2)(i) - Before an employee is assigned to an occupation exposed to airborne concentrations of asbestos fibers at or above the TWA and/or excursion limit, a pre-placement medical examination shall be provided or made available by the employer.

§1910.1001(l)(2)(ii) - Such examination shall include, as a minimum, a medical and work history; a complete physical examination of all systems with emphasis on the respiratory system, the cardiovascular system and digestive tract; completion of the respiratory disease standardized questionnaire in Appendix D to this section, Part 1; a 14- by 17-inch or other reasonably-sized standard film or digital posterior-anterior chest X-ray; pulmonary function tests to include forced vital capacity (FVC) and forced expiratory volume at 1 second (FEV(1.0)); and any additional tests deemed appropriate by the examining physician. Classification of chest X-rays shall be conducted in accordance with Appendix E to this section.

Periodic examinations (§1910.1001(l)(3))

§1910.1001(l)(3)(i) - Periodic medical examinations shall be made available annually.

§1910.1001(l)(3)(ii) - The scope of the medical examination shall be in conformance with the protocol established in paragraph (l)(2)(ii) of this section, except that the frequency of chest X-rays shall be conducted in accordance with Table 2, and the abbreviated standardized questionnaire contained in, Part 2 of Appendix D to this section shall be administered to the employee.

Table 2. -- Frequency of Chest X-Rays

Years since first exposure	Age of employee		
	15 to 35	35+ to 45	45+
0 to 10.....	Every 5 years.....	Every 5 years....	Every 5 years.
10+.....	Every 5 years.....	Every 2 years....	Every 1 year.

Termination of employment examinations (§1910.1001(l)(4))

§1910.1001(l)(4)(i) - The employer shall provide, or make available, a termination of

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employment medical examination for any employee who has been exposed to airborne concentrations of fibers of asbestos at or above the TWA and/or excursion limit.

§1910.1001(l)(4)(ii) - The medical examination shall be in accordance with the requirements of the periodic examinations stipulated in paragraph (l)(3) of this section, and shall be given within 30 calendar days before or after the date of termination of employment.

Purpose: The principal purpose of medical surveillance is the prevention or detection of abnormalities that may occur in some asbestos-exposed workers early enough to prevent future or progressive adverse health effects. Documentation and maintenance of the medical-examination results provide a continuous record of worker health. Physicians use these records to determine the extent to which workers, since their last examination, experience health effects related to their asbestos exposure. Further, if symptoms of 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.

Information provided to the physician (§1910.1001(l)(6)) - The employer shall provide the following information to the examining physician:

§1910.1001(l)(6)(i) - A copy of this Standard and appendices D and E.

§1910.1001(l)(6)(ii) - A description of the affected employee's duties as they relate to the employee's exposure.

§1910.1001(l)(6)(iii) - The employee's representative exposure level or anticipated exposure level.

§1910.1001(l)(6)(iv) - A description of any personal protective and respiratory equipment used or to be used.

§1910.1001(l)(6)(v) - Information from previous medical examinations of the affected employee that is not otherwise available to the examining physician.

Purpose: Making this information available to physicians assists them in evaluating an worker's health and fitness for specific job assignments involving asbestos exposure. In the case of medical examinations administered in response to emergency exposures, the physician can use the exposure information to devise an appropriate treatment.

Physician's written opinion (§1910.1001(l)(7))

§1910.1001(l)(7)(i) - The employer shall obtain a written signed opinion from the examining physician. This written opinion shall contain the results of the medical examination and shall include:

§1910.1001(l)(7)(i)(A) - The physician's opinion as to whether the employee has any detected medical conditions that would place the employee at an increased risk of material health impairment from exposure to asbestos;

§1910.1001(l)(7)(i)(B) - Any recommended limitations on the employee or upon the use of personal protective equipment such as clothing or respirators;

§1910.1001(l)(7)(i)(C) - A statement that the employee has been informed by the physician of the results of the medical examination and of any medical conditions resulting from asbestos exposure that require further explanation or treatment; and

§1910.1001(l)(7)(i)(D) - A statement that the employee has been informed by the physician of the increased risk of lung cancer attributable to the combined effect of smoking and asbestos exposure.

§1910.1001(l)(7)(ii) - The employer shall instruct the physician not to reveal in the written opinion given to the employer specific findings or diagnoses unrelated to occupational exposure to asbestos.

§1910.1001(l)(7)(iii) - The employer shall provide a copy of the physician's written opinion to the affected employee within 30 days from its receipt.

Purpose: The purpose in requiring the employer to obtain a written opinion from the examining physician is to provide the employer with a medical basis to aid in the determination of initial placement of workers and to assess the worker's ability to use protective clothing and equipment. The physician's written opinion also provides information to the employer as to whether the worker maybe suffering from overexposure to asbestos. The requirement that a physician's opinion be in written form will ensure that employers have had the benefit of the information. Providing workers with a copy of the physician's written opinion informs them of the medical-examination results so that they can assist in determining the need for, and evaluate the effectiveness of, treatment or other interventions.

G. Recordkeeping (§1910.1001(m))

Exposure measurements (§1910.1001(m)(1))³

§1910.1001(m)(1)(i) - The employer shall keep an accurate record of all measurements taken to monitor employee exposure to asbestos as prescribed in paragraph (d) of this section.

§1910.1001(m)(1)(ii) - This record shall include at least the following information:

§1910.1001(m)(1)(ii)(A) - The date of measurement;

§1910.1001(m)(1)(ii)(B) - The operation involving exposure to asbestos which is being monitored;

§1910.1001(m)(1)(ii)(C) - Sampling and analytical methods used and evidence of their accuracy;

§1910.1001(m)(1)(ii)(D) - Number, duration, and results of samples taken;

§1910.1001(m)(1)(ii)(E) - Type of respiratory protective devices worn, if any; and

§1910.1001(m)(1)(ii)(F) - Name and exposure of the employees whose exposure are represented.

§1910.1001(m)(1)(iii) - The employer shall maintain this record for at least thirty (30) years, in accordance with 29 CFR 1910.1020.

Objective data for exempted operations (§1910.1001(m)(2))

§1910.1001(m)(2)(i) - Where the processing, use, or handling of products made from or containing asbestos is exempted from other requirements of this section under paragraph (d)(2)(iii) of this section, the employer shall establish and maintain an accurate record of objective data reasonably relied upon in support of the exemption.

§1910.1001(m)(2)(ii) - The record shall include at least the following:

§1910.1001(m)(2)(ii)(A) - The product qualifying for exemption;

§1910.1001(m)(2)(ii)(B) - The source of the objective data;

§1910.1001(m)(2)(ii)(C) - The testing protocol, results of testing, and/or analysis of the

³The employer may utilize the services of competent organizations such as industry trade associations and employee associations to maintain the records required by this section.

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material for the release of asbestos;

§1910.1001(m)(2)(ii)(D) - A description of the operation exempted and how the data support the exemption; and

§1910.1001(m)(2)(ii)(E) - Other data relevant to the operations, materials, processing, or employee exposures covered by the exemption.

§1910.1001(m)(2)(iii) - The employer shall maintain this record for the duration of the employer's reliance upon such objective data.

Medical surveillance (§1910.1001(m)(3))

§1910.1001(m)(3)(i) - The employer shall establish and maintain an accurate record for each employee subject to medical surveillance by paragraph (l)(1)(i) of this section, in accordance with 29 CFR 1910.1020.

§1910.1001(m)(3)(ii) - The record shall include at least the following information:

§1910.1001(m)(3)(ii)(A) - The name of the employee;

§1910.1001(m)(3)(ii)(B) - Physician's written opinions;

§1910.1001(m)(3)(ii)(C) - Any employee medical complaints related to exposure to asbestos; and

§1910.1001(m)(3)(ii)(D) - A copy of the information provided to the physician as required by paragraph (l)(6) of this section.

§1910.1001(m)(3)(iii) - The employer shall ensure that this record is maintained for the duration of employment plus thirty (30) years, in accordance with 29 CFR 1910.1020.

Training (§1910.1001(m)(4)) - The employer shall maintain all employee training records for one (1) year beyond the last date of employment of that employee.

Availability (§1910.1001(m)(5))

§1910.1001(m)(5)(i) - The employer, upon written request, shall make all records required to be maintained by this section available to the Assistant Secretary and the Director for examination and copying.

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§1910.1001(m)(5)(ii) - The employer, upon request shall make any exposure records required by paragraph (m)(1) of this section available for examination and copying to affected employees, former employees, designated representatives and the Assistant Secretary, in accordance with 29 CFR 1910.1020(a) through (e) and (g) through (i).

§1910.1001(m)(5)(iii) - The employer, upon request, shall make employee medical records required by paragraph (m)(3) of this section available for examination and copying to the subject employee, to anyone having the specific written consent of the subject employee, and the Assistant Secretary, in accordance with 29 CFR 1910.1020.

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 Items 12 of this Supporting Statement.

Transfer of records (§1910.1001(m)(6))

§1910.1001(m)(6) - The employer shall comply with the requirements concerning transfer of records set forth in 29 CFR 1910.1020(h).

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.

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 employee 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 employee 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.

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,

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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 establishing and maintaining exposure-monitoring and medical-surveillance records. OSHA wrote the collections of information requirements of the Standard in performance-oriented language (i.e., in terms of what data to maintain, not how to maintain 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 information required to be collected and maintained is specific to each employer and worker involved and is not available or duplicated by another source. The information required by this Standard is available only from employers. At this time, there is no indication that any alternate source is available.

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 this Standard are the minimum that OSHA believes are necessary to ensure that the employer and OSHA can effectively monitor the exposure and health status of employees working with asbestos in general industry.

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;**

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- **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)(7) of the Standard, employers must, within 15 working days after the receipt of exposure monitoring results, notify the affected employees of their results in writing either individually or by posting the results in an appropriate location that is accessible to affected employees. This is to ensure that everyone working around asbestos has been informed of its presence.

Also in 1910.1001(d)(2), within 24 hours of its discovery, all employers who discover ACM and/or PACM on a worksite must convey information concerning the presence, location, and quantity of the newly discovered ACM and/or PACM to the owner and to other employers of employees working at the worksite. This is also to ensure that everyone is aware that asbestos is present.

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.

In accordance with 5 CFR 1320.11, OSHA has submitted a revised Asbestos in General Industry (29 CFR 1910. 1001) Information Collection Request (ICR) to the Office of Management and Budget (OMB) for the Standards Improvement Project–Phase IV (SIP-IV) rulemaking.

OSHA sought public comment on revisions to this package when the Agency published the SIP-IV NPRM on October 4, 2016 (81 FR 68504). The Agency received no comments in response to this notice during the comment period for the NPRM.

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This ICR seeks OMB approval for changes to the collection in accordance with the SIP-IV Final Rule, which is one of OSHA's Standards Improvement Projects. These projects review existing safety and health standards in response to Executive Order 13563, "Improving Regulation and Regulatory Review" (76 FR 3821). They are intended to improve and streamline OSHA standards by removing or revising requirements that are confusing or outdated, or that duplicate, or are inconsistent with, other standards. The goal of the SIP-IV Final Rule is to reduce regulatory burden while maintaining or enhancing worker safety and health.

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

No payments or gifts will be provided to the respondents.

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

Since medical records contain information that may be considered private, OSHA has taken steps to ensure that the data are kept private to the extent allowed by law. Rules of Agency practice and procedure governing OSHA access to worker medical records are contained in 29 CFR 1913.10. The legal authority for these procedural regulations is found in sections 8(c)(1) and 8(g)(2) of the Occupational Safety and Health Act, 29 U.S.C. 657.

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 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 costs to respondents for the hour burdens for collections of information, identifying and using appropriate wage rate categories.

Summary of Burden-Hour and Cost Estimates

The Agency determined average wage rates for asbestos using average hourly earnings, including benefits, to represent the cost of employee time. For the relevant occupational categories, OSHA adjusted the mean hourly earnings according to the Bureau of Labor Statistics (BLS), U.S. Department of Labor, *Occupational Employment Statistics* (OES), May 2015 (www.bls.gov/oes/) to allow for fringe benefits. To account for fringe benefits, we used the fringe benefit rate reported in BLS' Employer Costs for Employee Compensation (ECEC) news release for December 2015 (BLS, 2016).⁴ BLS reported that for private industry, fringe benefits accounted for 31.3 percent of total compensation and wages accounted for the remaining 68.7 percent. To calculate the loaded hourly wage for each occupation, thus we divide the mean hourly wage by 68.7 percent.

The costs of labor used in this analysis are therefore estimates of total hourly compensation. These hourly wages are:

Supervisory Manufacturing Employee	\$41.94 ⁵
Manufacturing Employee	\$25.34 ⁶
Clerical Employee	\$24.31 ⁷

Burden Hour and Cost Determinations

The following sections summarize the methodology used for estimating the number of burden hours and costs resulting from the information collection requirements of the Standard.

To calculate burden hours and costs, facilities are divided into two categories, primary and secondary manufacturing. The number of primary and secondary manufactures is based on the 1994 Final regulatory impact and regulatory flexibility analysis. As noted in previous ICRs, since 1994 asbestos consumption in the US had declined considerably from 26,800 metric tons to only 715 tons in 2009.⁸ In 2015, asbestos consumption in the U.S continued to decrease, to an

4 Source: http://www.bls.gov/news.release/archives/ecec_03102016.htm .

5 The mean hourly wage for SOC 51-1011, "Production Occupations," "First-Line Supervisors of Production and Operating Workers" is \$28.81.

6 The mean hourly wage for SOC 51-0000, "Production Occupations," is \$17.41.

7 The mean hourly wage for SOC 43-9199 "Office and Administrative Support Occupations," "Office and Administrative Support Workers,All Other" is \$16.70.

8 Source: U.S Geological Survey, Mineral Commodity Summaries, Asbestos, 2010, <http://minerals.usgs.gov/minerals/pubs/commodity/asbestos/mcs-2010-asbes.pdf> .

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estimated 358 tons.⁹ Based on these data as well as on information obtained from conversations with the U.S. Geological Survey staff, OSHA assumes, conservatively, that the number of affected facilities has declined by one half since 1994.¹⁰ Primary facilities, approximately 55 facilities, use raw asbestos to manufacture products. The primary asbestos manufacturing category covered by the Standard includes producers of asbestos-cement (A/C) pipe; A/C sheet; friction materials; resilient flooring; paper; coating and sealants; gaskets; and asbestos-reinforced plastics. Secondary manufacturing is defined as establishments that receive products from primary manufacturers and further process or fabricate these products to produce other intermediate or finished products. There are 66 secondary manufacturing facilities. Secondary processing involves sawing, pressing, slitting or drilling of asbestos-containing materials. Primary asbestos products that undergo significant secondary processing include gaskets and packing, plastics and textiles. Total manufacturing facilities are 121.

A. Exposure monitoring (§1910.1001(d))

OSHA assumes that initial exposure monitoring has been completed; therefore burden for initial monitoring is not included in this package. Following initial monitoring, exposure monitoring must be repeated at least every six months for employees whose exposures to asbestos may reasonably be foreseen to exceed limits. The Economic Analysis assumes that employers would hire Industrial Hygiene Services to conduct the monitoring. Therefore, those costs are calculated in Item 13 of this package, and no burden is taken here.

Employee notification of monitoring results (§1910.1001(d)(7))

Employers must notify affected employees of their exposure-monitoring results, within 15 days receipt. Employers may either individually notify employees or post the exposure-monitoring results in an appropriate location that is accessible to affected employees.

As posting is least burdensome, OSHA estimates that employers post the exposure-monitoring results in a central location. OSHA estimates a secretary takes 5 minutes (.08 hour) to post the monitoring results.

To estimate the frequency and number of exposure monitoring samples for time-weighted average (TWA), OSHA assumes employers sample one employee at each workstation to represent the asbestos exposure of all employees working at that station. OSHA estimates that a workstation in primary manufacturing is comprised of 9.6 employees and workstations in

⁹ Source: U.S. Geological Survey, Mineral Commodity Summaries, Asbestos, January 2016, <http://minerals.usgs.gov/minerals/pubs/commodity/asbestos/mcs-2016-asbes.pdf>.

¹⁰ The 2010 asbestos ICR assumed 110 primary and 133 secondary manufacturers affected by the standard.

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secondary manufacturing are comprised of 15.7 employees per work station. To calculate sample numbers, the estimated number of employees exposed above the TWA was divided by the average number of employees at the work stations. OSHA estimates there are 1,391 employees in primary manufacturing and 3,446 employees in secondary manufacturing that are exposed above the time-weighted average. OSHA assumed that employers monitor twice per year.

Periodic monitoring for the TWA

Primary manufacturing

Number of workstations: $1,391 \text{ employees} / 9.6 \text{ employees per station} = 145 \text{ workstations}$

Burden hours: $145 \text{ workstations} \times 1 \text{ sample} \times 2 \text{ times/year} \times .08 \text{ hour} = 23 \text{ hours}$

Costs: $23 \text{ hours} \times \$24.31 = \$559$

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Secondary manufacturing

Number of workstations: $3,446 \text{ employees} / 15.7 \text{ employees per station} = 219 \text{ workstations}$

Burden hours: $219 \text{ workstations} \times 1 \text{ sample} \times 2 \text{ times/year} \times .08 \text{ hour} = 35 \text{ hours}$

Costs: $35 \text{ hours} \times \$24.31 = \$851$

For excursion limit (EL) monitoring, OSHA assumes that 50% of the facilities exceed the limit and subsequently perform semi-annual periodic monitoring. OSHA estimates 55 primary manufacturers and 66 secondary manufacturers are involved, and that primary manufacturers conduct 4 exposure-monitoring samples per year, and secondary manufacturers conduct 3 exposure-monitoring samples.

Periodic monitoring for the EL

Primary manufacturing

Burden hours: $(55 \text{ manufacturing facilities} \times 50\%) \times 4 \text{ samples/facility} \times 2 \text{ times/year} \times .08 \text{ hour/posting} = 18 \text{ hours}$

Costs: $18 \text{ hours} \times \$24.31 = \$438$

Secondary manufacturing

Burden hours: $(66 \text{ manufacturing facilities} \times 50\%) \times 3 \text{ samples/facility} \times 2 \text{ times/yr} \times .08 \text{ hour/posting} = 16 \text{ hours}$

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Costs: 16 hours x \$24.31 = \$389

Additional monitoring

Employers must conduct additional monitoring whenever there is a change in production, process, control equipment, personnel or work practices that may result in new or additional exposures to asbestos.

Additional monitoring TWA

OSHA estimates there is change in process in 1% of all workstations where exposures exceed the PEL/TWA which would require additional monitoring.

Primary manufacturing

Burden hours: 145 workstations x 1% x 1 sample x 2 times/year x .08 hour = 1 hour
Costs: 1 hour x \$24.31 = \$24

Secondary manufacturing

Burden hours: 219 workstations x 1% x 1 sample x 2 times/year x .08 hour = 1 hour
Costs: 1 hour x \$24.31 = \$24

Additional monitoring EL

OSHA estimates there is a process change at one percent of all facilities where exposures exceed the PEL/EL.

Primary manufacturing

Burden hours: (55 manufacturing facilities x 50%) x 1 % x 4 samples/facility x 2 times/year x .08 hour = 1 hour
Costs: 1 hour x \$24.31 = \$24

Secondary manufacturing

Burden hours: (66 manufacturing facilities x 50%) x 1 % x 3 samples/facility x 2 times/year x .08 hour = 1 hour
Costs: 1 hour x \$24.31 = \$24

Table 1 -- Summary of Burden Hours

and Cost for Exposure Monitoring

	Hours	Cost
TWA Periodic Monitoring		
Primary Manufacturing	23	\$559
Secondary Manufacturing	35	\$851
EL Periodic Monitoring		
Primary Manufacturing	18	\$438
Secondary Manufacturing	16	\$389
TWA Additional Monitoring		
Primary Manufacturing	1	\$24
Secondary Manufacturing	1	\$24
EL Additional Monitoring		
Primary Manufacturing	1	\$24
Secondary Manufacturing	1	\$24
Total Burden Hour/Cost	96	\$2,333

B. Compliance program (§1910.1001(f)(2)(i), (ii) and (iii))

Employers have completed developing the initial compliance program, therefore no burden is taken for this activity. However, employers must review and update their compliance plans as necessary to reflect significant changes in the compliance program. OSHA estimates that 30 minutes (.5 hour) of supervisory time is required to update the compliance program and that 50% of primary and 50% of secondary manufacturers annually update their plans. The burden and costs are as follows:

Primary manufacturers

Burden hours: (55 facilities x 50%) x 1 update/year x .5 hour = 14 hours
Costs: 14 hours x \$41.94 = \$587

Secondary manufacturers

Burden hours: (66 facilities x 50%) x 1 update/year x .5 hour = 17 hours
Costs: 17 hours x \$41.94 = \$713

Specific compliance methods (§1910.1001(f)(3)(i) and (ii))

Specific compliance instructions are provided in the Standard for work associated with brake and clutch repair; however, if employers choose to use another method of compliance, they must follow other, written procedures. Some burden would occur if employers used procedures other

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than those prescribed; however, OSHA assumes that employers choose the less burdensome method of compliance and follow the procedures outlined in the Standard. Therefore, no burden has been allocated for this provision.

C. Respirator program (§1910.1001(g)(2)(i), previously (g)(3)(i))

The Standard requires the employer to institute a respiratory protection program in accordance with 29 CFR 1910.134. No burden is taken for this requirement. The burden is taken in the Respiratory Protection Standard ICR for §1910.134 (OMB Control Number 1218-0099).

D. Protective work clothing and equipment (§1910.1001(h)(3)(iv) and (v))

The Regulatory Impact Analysis assumes all affected employers provide employees with disposable clothing, which requires no laundering. Therefore, no burden has been taken for this provision.

E. Communication of hazards to employees

Duties of employers and building and facility owners (§1910.1001(j)(2)(i), (ii), (iii))

Building and facility owners must determine the presence, location and quantity of asbestos containing material (ACM) and/or presumed asbestos containing material (PACM) at the work site. Building and facility owners must maintain asbestos information for the duration of ownership and must be transferred to successive owners. OSHA assumes that building evaluations have been completed.

Building and facility owners and employers of potentially exposed employees must convey specific information to employees regarding the location of ACM and PACM in their work environment.

OSHA estimates 25% of primary and secondary facilities owners notify contractors four times a year of ACM/PACM presence. Each notification takes three minutes (.05 hour) of supervisory time.

Primary manufacturing

Burden hours: (55 manufacturing facilities x 25%) x 4 times/year x .05 hour = 3 hours

Costs: 3 hours x \$41.94 = \$126

Secondary manufacturing

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Burden hours: (66 manufacturing facilities x 25%) x 4 times/year x .05 hour = 3 hours
Costs: 3 hours x \$41.94 = \$126

Each facility has one contractor and each contractor has 2 housekeeping employees. OSHA estimates 25% of the contractors are required to notify employees working in the presence of ACM/PACM four times a year. Each notification takes five minutes (.08 hour).

Primary manufacturing

Burden hours: (55 manufacturing facilities x 25%) x 4 times/year x .08 hour = 4 hours
Costs: 4 hours x \$41.94 = \$168

Secondary manufacturing

Burden hours: (66 manufacturing facilities x 25%) x 4 times/year x .08 hour = 5 hours
Costs: 5 hours x \$41.94 = \$210

Warning signs and labels (§1910.1001(j)(3)(i) and (j)(4)(i) and (ii))

The Standard provides specific language for the required signs and the labels. Therefore, OSHA took no burden hours or costs for these requirements. (See final rule entitled “Controlling Paperwork Burden on the Public,” 5 CFR 1320.3(c)(2))

F. Medical surveillance (§1910.1001(l))

Pre-Placement examinations (§1910.1001(l)(2))

Before an employee is assigned to an occupation involving exposure to airborne concentrations of asbestos fibers at or above the TWA and/or EL, employers must provide a physical examination to the employee. For purposes of calculating burden hours and costs for new hires, OSHA estimates there is a 20% employee turnover in the industry. There are 4,837 employees eligible for medical surveillance program (1,391 primary manufacturing employee + 3,446 secondary manufacturing employees = 4,837). Each examination takes 1.5 hours of the employee’s time (this includes 30 minutes of travel time). The burden is as follows:

Burden hours: 4,837 examinations x 20% x 1.5 hour = 1,451 hours
Costs: 1,451 hours x \$25.34 = \$36,768

Periodic examinations (§1910.1001(l)(3))

Employees receive only one examination annually, either pre-placement or periodic. Therefore,

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in most instances, the termination of employment examination is accounted for by these types of examinations. OSHA assumes one examination each year for the number of employees exposed (4,837). Each medical examination takes 1.5 hours of employee time (this includes 30 minutes of travel time). The burden for periodic and termination of employment exams is:

Burden hours: 4,837 examinations x 1 examination per year x 1.5 hour = 7,256 hours
Costs: 7,256 hours x \$25.34 = \$183,867

Medical questionnaire (§1910.1001(l)(2)(ii) and Appendix D))

In addition to the initial examination, paragraph (l)(2)(ii) of the Regulation requires that the medical questionnaire in Appendix D, Part 1 be administered to each employee. Completion of the questionnaire by an employee takes 30 minutes (.5 hour).

Burden hours: 4,837 employees x 20% turnover rate x 1 time x .5 hour = 484 hours
Costs: 484 hours x \$25.34 = \$12,265

In addition to the periodic medical examination the follow-up medical questionnaire, Appendix D, Part 2, must be administered for each employee receiving a periodic examination. This questionnaire is a shorter questionnaire than the first pre-placement questionnaire. Employees take 10 minutes (.17 hour) to complete the briefer questionnaire.

Burden hours: 4,837 questionnaires x 1 per year x .17 hour = 822 hours
Costs: 822 hours x \$25.34 = \$20,829

Information provided to the physician (§1910.1001(l)(6))

Employers take 5 minutes (.08 hour), per employee, to furnish the required information to the physician. The estimated number of examinations is based on the number of employees (4,837) and a 20% turnover rate or (4,837 x 1.2). A secretary, earning \$24.31 per hour provides the required information to the physician.

Burden hours: 4,837 employees x 1.2 turnover rate x 1 per year x .08 hour = 464 hours
Costs: 464 hours x \$24.31 = \$11,280

Physician's written opinion (§1910.1001(1)(7))

To make and distribute a copy of the physician's written opinion to the employee takes an employer 5 minutes (.08 hour). As stated above the number of examinations is based on the number of employees (4,837) and a 20% turnover rate or (4,837 x 1.2). A secretary provides the opinion to the employee.

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Burden hours: 4,837 employees x 1.2 turnover rate x 1/year x .08 hour = 464 hours
Costs: 464 hours x \$24.31 = \$11,280

G. Recordkeeping (§1910.1001(m))

Maintaining the records required by the regulation, takes a clerical employee 5 minutes (.08 hour) per record. Thus the burden for the recordkeeping provision is as follows:

Exposure monitoring records (§1910.1001(m)(1)(I))

Periodic monitoring for the EL

Primary manufacturing

Burden hours: (55 manufacturing facilities x 50%) x 4 samples/facility x 2 times/year
x .08 hour = 18 hours
Costs: 18 hours x \$24.31 = \$438

Secondary manufacturing

Burden hours: (66 manufacturing facilities x 50%) x 3 samples/facility x 2 times/year
x .08 hour = 16 hours
Costs: 16 hours x \$24.31 = \$389

Periodic monitoring (TWA)

Burden hours: 145 workstations x 1 sample x 2 times/year x .08 hour = 23 hours
Costs: 23 hours x \$24.31 = \$559

Burden hours: 219 workstations x 1 sample x 2 times/year x .08 hour = 35 hours
Costs: 35 hours x \$24.31 = \$851

Additional monitoring (PEL/EL)

Burden hours: (55 manufacturing facilities x 50%) x 1 % x 4 samples/facility x 2
times/year x .08 hour = 1 hour
Costs: 1 hour x \$24.31 = \$24

Burden hours: (66 manufacturing facilities x 50%) x 1 % x 3 samples/facility x 2

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times/year x .08 hour = 1 hour
Costs: 1 hour x \$24.31 = \$24

Additional monitoring (PEL/TWA)

Burden hours: 145 workstations x 1% x 1 sample x 2 times/year x .08 hour = 1 hour
Costs: 1 hour x \$24.31 = \$24

Burden hours: 219 workstations x 1% x 1 sample x 2 times/year x .08 hour = 1
hour
Costs: 1 hour x \$24.31 = \$24

**Table 2 -- Summary of Burden Hours
 and Cost for Exposure Monitoring Records**

Exposure Monitoring Records	Burden Hours	Cost
Primary manufacturing	18	\$438.00
Secondary manufacturing	16	\$389.00
Periodic monitoring (TWA)	23	\$559.00
	35	\$851.00
Additional monitoring (PEL/EL)	1	\$24.00
	1	\$24.00
Additional monitoring (PEL/ TWA)	1	\$24.00
	1	\$24.00
Total	96	\$2,333.00

Medical records (§1910.1001(m)(3))

Burden hours: 4,837 employees x 1.2 turnover rate x 1/year x .08 hour = 464 hour
Costs: 464 hours x \$24.31 = \$11,280

Training records (§1910.1001(m)(4))

Primary manufacturing

Burden hours: 1,391 employees x 20% turnover rate/20 employees per session x 1 time/year x .08 hour = 1 hour
Costs: 1 hour x \$24.31 = \$24

Secondary manufacturing

Burden hours: 3,446 employees x 20% turnover rate/20 employees per session x 1 time/year x .08 hour = 3 hours
Costs: 3 hours x \$24.31 = \$73

Primary manufacturing (housekeeping employees)

Burden hours: 110 employees x 10% turnover rate/20 employees per session x .08 hour = 1 hour
Costs: 1 hour x \$24.31 = \$24

Secondary manufacturing (housekeeping employees)

Burden hours: 133 employees x 10% turnover rate/20 employees per session x .08 hour
 = 1 hour

Costs: 1 hour x \$24.31 = \$24

Table 3 -- Summary of Burden Hours and Cost for Training Records

Training Records	Burden Hours	Cost
Primary manufacturing	1	\$24.00
Secondary manufacturing	3	\$73.00
Primary manufacturing (housekeeping employees)	1	\$24.00
Secondary Manufacturing (housekeeping employees)	1	\$24.00
Total	6	\$145

Employee access (§§ 1910.1001(m)(5)(ii)-(iii))

The Agency estimates that approximately 10% of the employees request to see his or her records annually, therefore the burden is as follows:

Burden hours: 4,837 employees x 10% x .08 hour = 39 hours

Costs: 39 hours x \$24.31 = \$948

Federal government access (§§ 1910.1001(m)(5))

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 Items 12 of this Supporting Statement.

Table 4 – Summary of Burden Hours and Cost

Information Collection Requirement	Responses	Time per response	Burden Hours	Wage Rate	Cost
A. Exposure monitoring					
Notification of monitoring results	1,157	0.08 hour	96	\$24.31	\$2,333
B. Compliance program					

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Information Collection Requirement	Responses	Time per response	Burden Hours	Wage Rate	Cost
Written compliance program	61	0.5 hour	31	\$41.94	\$1,300
Specific compliance methods	0	0	0	0	0
C. Respirator protection	0	0	0	0	0
D. Protective work clothing and equipment	0	0	0	0	0
E. Communication of Hazards to employees					
Duties of Employers and Building	121	0.05 hour	6	\$41.94	\$252
	121	0.08 hour	9	\$41.94	\$378
Warning signs and labels	0	0	0	0	0
Employee information and training	0	0	0	0	0
F. Medical surveillance					
Medical examination	5,804	1.5 hour	8,707	\$25.34	\$220,635
Medical questionnaires	967	0.5 hour	484	\$25.34	\$12,265
	4,837	0.17 hour	822	\$25.34	\$20,829
Information provided to the physician	5,804	0.08 hour	464	\$24.31	\$11,280
Physician's written opinion	5,804	0.08 hour	464	\$24.31	\$11,280
G. Recordkeeping					
Exposure monitoring records	1,157	0.08 hour	96	\$24.31	\$2,333
Medical records	5,804	0.08 hour	464	\$24.31	\$11,280
Training records	50	0.08 hour	6	\$24.31	\$145
Employee access	484	0.08 hour	39	\$24.31	\$948
Federal government access	0		0		0
Total	32,171		11,688		\$295,258

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.)

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- **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.**

The Agency assumes that employers would contract out Industrial Hygiene Services at the cost of \$50.25 per hour.¹¹ Thus the costs are as follows:

For the PEL/ EL periodic monitoring, it is assumed that 50% of the facilities will continue to exceed the limit and subsequently will perform semi-annual monitoring. It is estimated that approximately 55 primary and 66 secondary manufacturers will be affected. Also, 3 to 4 samples will be collected during each sampling period. Thus the costs are as follows:

Periodic monitoring for EL

Primary manufacturing

(55 Manufacturing facilities x 50%) x 4 samples/facility x 2 times/year x \$50.25 = \$11,055

Secondary manufacturing

¹¹ Source: To calculate the cost for contract industrial hygiene services, the Agency used the most recent OES mean hourly wage rate for SOC code 29-9011, Occupational Health and Safety Specialist, \$34.51. (See: <http://www.bls.gov/oes/current/oes299011.htm>.) The wage rate was multiplied by 1.456 to adjust for fringe benefits. The total hourly employee compensation is \$50.25 for SOC 29-9011. In older ICRs, the Agency calculated this cost using the Consumer Price Index (CPI) to inflate estimates from the previous ICR. However, the Agency has now determined that using the most recent OES wage data is a better source for estimating this exposure monitoring cost to employers.

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$(66 \text{ Manufacturing facilities} \times 50\%) \times 3 \text{ samples/facility} \times 2 \text{ times/year} \times \$50.25 = \$9,950$

For TWA monitoring, employers sample one employee at each workstation to represent the asbestos exposure of all employees working at that workstation. Workstations in primary manufacturing have approximately 9.6 employees per workstation. In secondary manufacturing there are 15.7 employees per station. To calculate sample numbers and derive burden, the estimated number of employees exposed above the level was divided by the average size workstation (9.6 and 15.7 workstations). Monitoring occurs twice annually; the costs are as follows:

Periodic monitoring for TWA

Primary manufacturing

$1,391 \text{ employees} / 9.6 \text{ employees per workstation} = 145 \text{ workstations}$
 $145 \text{ workstations} \times 1 \text{ sample} \times 2 \text{ times/year} \times \$50.25 = \$14,573$

Secondary manufacturing

$3,446 \text{ employees} / 15.7 \text{ employees per workstation} = 219 \text{ workstations}$
 $219 \text{ workstations} \times 1 \text{ sample} \times 2 \text{ times/year} \times \$50.25 = \$22,010$

Additional monitoring EL

A process change occurs at one percent of all facilities where exposures exceed the PEL/EL. Therefore, it was estimated that the burden associated will be as follows:

Primary manufacturing

$(55 \text{ Manufacturing} \times 50\%) \times 1\% \times 4 \text{ samples/facility} \times 2 \text{ times/year} \times \$50.25 = \$111$

Secondary manufacturing

$(66 \text{ Manufacturing} \times 50\%) \times 1\% \times 3 \text{ samples/facility} \times 2 \text{ times/year} \times \$50.25 = \$99$

Additional monitoring TWA

A process change occurs at one percent of all facilities where exposures exceed the PEL/TWA. Therefore, it was estimated that the burden associated will be as follows:

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Primary manufacturing

145 workstations x 1% x 1 sample x 2 times/year x \$50.25= \$146

Secondary manufacturing

219 workstations x 1% x 1 sample x 2 times/year x \$50.25 = \$220

Table 5 -- Summary of Estimated Cost

Exposure Monitoring Activity	Cost to Primary Manufacturing	Cost to Secondary Manufacturing	Total
Periodic Monitoring EL	\$11,055	\$9,950	\$21,005
Periodic Monitoring TWA	\$14,573	\$22,010	\$36,583
Additional Monitoring EL	\$111	\$99	\$210
Additional Monitoring TWA	\$146	\$220	\$366
Total	\$25,885	\$32,279	\$58,164

Medical examinations

4,837 examinations x 20% (turnaround) x 1 time x \$156¹² = \$150,914
 4,837 examinations x 1 examination/year x \$156 = \$754,572
Total **\$905,486**

The total cost for respondents to conduct exposure monitoring and provide medical examinations is **\$963,650**.

¹² A previous ICR estimated the cost of a medical examination to be \$148. The Consumer Price Index (CPI) indicated a 5.7% increase in the price of professional medical care services from December 2013 to 2015. Source: BLS, *CPI Detailed Report* (March 2016); *Table 29, Historical Consumer Price Index for Urban Wage Earners and Clerical Workers (CPI-W): U.S. city average, by commodity and service group and detailed expenditure categories* (<http://www.bls.gov/cpi/cpid1603.pdf>). Given the 5.7% increase in the price of professional medical services, the cost of contract industrial hygiene services is assumed to have increased by 5.7% as well. Although exposure monitoring is not a medical service, the Agency believes the medical services category is the most comparable CPI measure for estimating the change in these collection of information costs.

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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.

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 Item 14 of this Supporting Statement.

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

As a result of the SIP-IV rulemaking, OSHA removed the requirement that employers document employees' social security numbers (SSN) in their exposure and medical records. Time to document SSN in records is negligible and, therefore, the Agency is not requesting any changes in the burden hour or cost estimates as a result. OSHA is also not taking burden hours for the updates to the chest x-ray requirements, which add the option of digital radiography, or the change to the question about race and ethnicity in Appendix D, because those changes do not impact the time required for medical examinations.

The Agency has recognized an error in the number of responses calculated in the previous ICR and therefore OSHA is decreasing the number of responses from 32,173 to 32,171.

Table 6
Summary of Current and Requested Burden Hours

Information Collection Requirement	Current Burden Hours	Requested Burden Hours	Change
A. Exposure monitoring			
Notification of monitoring results	96	96	0
B. Compliance program			
Written compliance program	31	31	0
Specific compliance methods	0	0	0
C. Respirator protection	0	0	0

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D. Protective work clothing and equipment	0	0	0
E. Communication of Hazards to employees			
Duties of Employers and Building	15	15	0
Warning signs and labels	0	0	0
Employee information and training	0	0	0
F. Medical surveillance			
Medical examination	8,707	8,707	0
Medical questionnaires	1,306	1,306	0
Information provided to the physician	464	464	0
Physician's written opinion	464	464	0
G. Recordkeeping			
Exposure monitoring records	96	96	0
Medical records	464	464	0
Training records	6	6	0
Employee access	39	39	0
Federal government access	0	0	0
Total	11,688	11,688	0

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.

This collection of information will not have results that will be published for statistical use.

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

There are no forms on which to display the expiration date.

18. Explain each exception to the certification statement.

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The collection of Information does not request any exemptions from 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.