

**SUPPORTING STATEMENT FOR THE  
INFORMATION COLLECTION REQUIREMENTS IN  
ASBESTOS IN CONSTRUCTION STANDARD  
(29 CFR 1926.1101)<sup>1</sup> (OMB CONTROL NO. 1218-0134 (January 2008))**

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

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<sup>1</sup> The purpose of this supporting statement is to analyze and describe the burden hours and costs associated with provisions of the Asbestos in Construction Standard that contain paperwork requirements; this supporting statement does not provide information or guidance on how to comply with, or how to enforce, the Standard.

Under the authority granted by the OSH Act, the OSHA published a health standard governing employee exposure to asbestos in construction (29 CFR 1926.1101). The basis for this standard is a determination by the Assistant Secretary for OSHA that occupational exposure to asbestos poses a hazard to workers. Years of exposure to asbestos can cause numerous disabling or fatal diseases. Among these diseases are asbestosis, a disease in which lung scarring (fibrosis) impairs breathing and causes death from respiratory or heart failure; lung cancer; mesothelioma, a cancerous tumor that spreads rapidly in the cells of membranes covering the lungs and body organs; and gastrointestinal cancer. The specific collection requirements of this standard are outlined below and fully discussed under Items 2 and 12.

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

#### **A. Multi-employer worksites (§1926.1101(d))**

*§1926.1101(d)(1)* - On multi-employer worksites, an employer performing work requiring the establishment of a regulated area shall inform other employers on the site of the nature of the employer's work with asbestos and/or presumed asbestos containing material (PACM), of the existence of and requirements pertaining to regulated areas, and the measures taken to ensure that employees of such other employers are not exposed to asbestos.

**Purpose:** Informing other employers at the worksite of asbestos and/or PACM ensures that the hazards concerning asbestos are known to all employers and employees working near this toxin; so that proper measures can be taken to eliminate any unnecessary exposures.

#### **B. Regulated areas (§1926.1101(e))**

*§1926.1101(e)(1)* - All Class I, II and III<sup>2</sup> asbestos work shall be conducted within regulated areas. All other operations covered by this standard shall be conducted within a regulated area where airborne concentrations of asbestos exceed, or there is a reasonable possibility they may exceed a PEL. Regulated areas shall comply with the requirements of paragraphs (2), (3),(4) and (5) of this section.

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<sup>2</sup> Class I asbestos work means activities involving the removal of thermal system insulation (TSI) or surfacing asbestos containing material (ACM) or PACM. Class II work means activities involving removal of ACM which is neither TSI or surfacing ACM. Class III asbestos work means repair and maintenance operations where "ACM", including TSI and surfacing ACM and PACM, is likely to be disturbed.

*Demarcation §1926.1101(e)(2)* - The regulated area shall be demarcated in any manner that minimizes the number of persons within the area and protects persons outside the area from exposure to airborne asbestos. Where critical barriers or negative pressure enclosures are used, they may demarcate the regulated area. Signs shall be provided and displayed pursuant to the requirements of paragraph (k)(7) of this section.

**Purpose:** Designated areas where employee exposures are over the PELs warn employees who are not essential to the performance of tasks within the areas to keep out. Demarcation also warns employees required to be in the regulated area that respirators need to be worn to avoid excessive exposure via inhalation and that good personal hygiene must be practiced to avoid exposure to asbestos via ingestion.

### **C. Exposure assessments and monitoring (§1926.1101(f))**

*Initial Exposure Assessment §1926.1101(f)(2)(i)* - Each employer who has a workplace or work operation covered by this standard shall ensure that a "competent person"<sup>3</sup> conducts an exposure assessment immediately before or at the initiation of the operation to ascertain expected exposures during that operation or workplace. The assessment must be completed in time to comply with requirements which are triggered by exposure data or the lack of a "negative exposure assessment," and to provide information necessary to assure that all control systems planned are appropriate for that operation and will work properly.

*§1926.1101(f)(2)(iii)* - Negative Exposure Assessment: For any one specific asbestos job which will be performed by employees who have been trained in compliance with the standard, the employer may demonstrate that employee exposures will be below the PELs by data which conform to the following criteria;

§1926.1101(f)(2)(iii)(A) - Objective data demonstrating that the product or material containing asbestos minerals or the activity involving such product or material cannot release airborne fibers in concentrations exceeding the TWA and excursion limit under those work conditions having the greatest potential for releasing asbestos; or

§1926.1101(f)(2)(iii)(B) - Where the employer has monitored prior asbestos jobs for the PEL and the excursion limit within 12 months of the current or projected job, the monitoring and analysis were performed in compliance with the asbestos standard in effect; and the data were obtained during work operations conducted under workplace

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<sup>3</sup> Competent person means, in addition to the definition in 29 CFR 1926.32(f), one who is capable of identifying existing asbestos hazards in the workplace and selecting the appropriate control strategy for asbestos exposure, who has the authority to take prompt corrective measures to eliminate them, as specified in 29 CFR 1926.32(f); in addition for Class I and Class II work who is specially trained in a training course which meets the criteria of the Environmental Protection Agency's (EPA) Model Accreditation Plan (40 CFR Part 763) for supervisor, or its equivalent, and for Class III and Class IV work, who is trained in a manner consistent with EPA requirements for training of local education agency maintenance and custodial staff as set forth at 40 CFR 763.92(a)(2).

conditions "closely resembling" the processes, type of material, control methods, work practices, and environmental conditions used and prevailing in the employer's current operations, the operations were conducted by employees whose training and experience are no more extensive than that of employees performing the current job, and these data show that under the conditions prevailing and which will prevail in the current workplace there is a high degree of certainty that employee exposures will not exceed the TWA and excursion limit; or

§1926.1101(f)(2)(iii)(C) - The results of initial exposure monitoring of the current job made from breathing zone air samples that are representative of the 8-hour TWA and 30-minute short-term exposures of each employee covering operations which are most likely during the performance of the entire asbestos job to result in exposures over the PELs.

***Periodic monitoring §1926.1101(f)(3)***

*Class I and II operations §1926.1101(f)(3)(i)* - The employer shall conduct daily monitoring that is representative of the exposure of each employee who is assigned to work within a regulated area who is performing Class I or II work, unless the employer pursuant to (f)(2)(iii) of this section, has made a negative exposure assessment for the entire operation.

*§1926.1101(f)(3)(ii)* - All operations under the standard other than Class I and II operations. The employer shall conduct periodic monitoring of all work where exposures are expected to exceed a PEL, at intervals sufficient to document the validity of the exposure prediction.

**Purpose:** Exposure monitoring assists employers in identifying areas or operations that may require efforts to reduce exposure and come into compliance with the standard. Monitoring results also assist employers in determining the necessity for using engineering controls, instituting or modifying work practices and in selecting appropriate respiratory protection to prevent employees from over exposure.

*Employee notification of monitoring results §1926.1101(f)(5)* - The employer must, as soon as possible but no later than 5 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.

*§1926.1101(f)(5)(i)* - The employer shall notify affected employees of the monitoring results that represent that employee's exposure as soon as possible following receipt of monitoring results.

*§1926.1101(f)(5)(ii)* - The employer shall notify affected employees of the results of monitoring representing the employee's exposure in writing either individually or by posting at a centrally located place that is accessible to affected employees.

**Purpose:** Posting enhances the collective knowledge in the workplace of employee exposures; which in turn enhances each employee's understanding of his/her own exposure. Posting the

results facilitates other employees, their designated representatives, supervisor and employers in becoming aware of exposure levels within the workplace.

**D. Methods of compliance (§1926.1101(g)(6)(ii) and (g)(8)(vi))**

§1926.1101(g)(6)(ii) - A certified industrial hygienist or licensed professional engineer who is also qualified as a project designer as defined in paragraph (b) of this section, shall evaluate the work area, the projected work practices and the engineering controls and shall certify in writing that the planned control method is adequate to reduce direct and indirect employee exposure to below the PELs under worst-case conditions of use, and that the planned control method will prevent asbestos contamination outside the regulated area, as measured by clearance sampling which meets the requirements of Environmental Protection Agency's Asbestos in Schools rule issued under AHERA, or perimeter monitoring which meets the criteria in paragraph (g)(4)(ii)(B) of this section.

§1926.1101(g)(6)(ii)(A) - Where the TSI or surfacing material to be removed is 25 linear or 10 square feet or less, the evaluation required in paragraph (g)(6) of this section may be performed by a "competent person", and may omit consideration of perimeter or clearance monitoring otherwise required.

§1926.1101(g)(6)(ii)(B) - The evaluation of employee exposure required in paragraph (g)(6) of this section, shall include and be based on sampling and analytical data representing employee exposure during the use of such method under worst-case conditions and by employees whose training and experience are equivalent to employees who are to perform the current job.

§1926.1101(g)(8)(vi) - *Alternative Work Practices and Controls* - Instead of the work practices and controls listed in paragraph (g)(8)(i) through (v) of this section, the employer may use different or modified engineering and work practice controls if the following provisions are complied with.

§1926.1101(g)(8)(vi)(A) - The employer shall demonstrate by data representing employee exposure during the use of such method under conditions which closely resemble the conditions under which the method is to be used, that employee exposure will not exceed the PELs under any anticipated circumstances.

§1926.1101(g)(8)(vi)(B) - A competent person shall evaluate the work area, the projected work practices and the engineering controls, and shall certify in writing, that the different or modified controls are adequate to reduce direct and indirect employee exposure to below the PELs under all expected conditions of use and that the method meets the requirements of this standard. The evaluation shall include and be based on data representing employee exposure during the use of such method under conditions which closely resemble the conditions under which the method is to be used for the current job,

and by employees whose training and experience are equivalent to employees who are to perform the current job.

**E. Respirator program (§1926.1101(h)(2)(i))**

*§1926.1101(h)(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).

**Purpose:** To ensure that employers establish a standardized procedure for selecting, using, and maintaining respirators for each workplace where respirators will be used. Developing written procedures requires employers to think through just how all of their requirements of the respiratory standard will be met in their workplace.

**F. Laundering protective clothing (§1926.1101(i)(2)(ii))**

Any employer who gives contaminated clothing to another person for laundering shall inform such person of the requirement in paragraph (i)(2)(i) of this section to effectively prevent the release of airborne asbestos in excess of the TWA and excursion limit prescribed in paragraph (c) of this section.

**Purpose:** By providing this information to the person doing the laundry, they can be protected from the potentially harmful effects of asbestos.

**G. Duties of building and facility owners (§1926.1101(k)(2))**

Before work subject to this standard is begun, building and facility owners shall determine the presence, location, and quantity of ACM and/or PACM at the work site pursuant to paragraph (k)(1) of this section.

*§1926.1101(k)(2)(ii)* - Building and/or facility owners shall notify the following persons of the presence, location and quantity of ACM or PACM, at the work sites in their buildings and facilities. Notification either shall be in writing, or shall consist of a personal communication between the owner and the person to whom notification must be given or their authorized representatives:

§1926.1101(k)(2)(ii)(A) - Prospective employers applying or bidding for work whose employees reasonably can be expected to work in or adjacent to areas containing such material;

§1926.1101(k)(2)(ii)(B) - Employees of the owner who will work in or adjacent to areas containing such material:

§1926.1101(k)(2)(ii)(C) - On multi-employer worksites, all employers of employees who will be performing work within or adjacent to areas containing such materials;

§1926.1101(k)(2)(ii)(D) - Tenants who will occupy areas containing such material.

**Purpose:** To ensure that the hazards concerning asbestos are properly conveyed to all employers and employees working in the presence of asbestos.

*Duties of Employers (§1926.1101(k)(3))* – Duties of employers whose employees perform work subject to this standard in or adjacent to areas containing ACM and PACM. Building/facility owners whose employees perform such work shall comply with these provisions to the extent applicable.

*§1926.1101(k)(3)(i)* - Before work in areas containing ACM and PACM is begun; employers shall identify the presence, location, and quantity of ACM, and/or PACM therein pursuant to paragraph (k)(1) of this section.

*§1926.1101(k)(3)(ii)* - Before work under this standard is performed employers of employees who will perform such work shall inform the following persons of the location and quantity of ACM and/or PACM present in the area and the precautions to be taken to insure that airborne asbestos is confined to the area.

§1926.1101(k)(3)(ii)(A) - Owners of the building/facility;

§1926.1101(k)(3)(ii)(B) - Employees who will perform such work and employers of employees who work and/or will be working in adjacent areas.

*§1926.1101(k)(3)(iii)* - Within 10 days of the completion of such work, the employer whose employees have performed work subject to this standard, shall inform the building/facility owner and employers of employees who will be working in the area of the current location and quantity of PACM and/or ACM remaining in the area and final monitoring results, if any.

**Purpose:** This is to ensure that the hazards concerning asbestos are properly conveyed to all employers and employees working in the presence of asbestos.

*§1926.1101(k)(4)* - In addition to the above requirements, all employers who discover ACM and/or PACM on a worksite shall convey information concerning the presence, location and quantity of such newly discovered ACM and/or PACM to the owner and to other employers of employees working at the work site, within 24 hours of the discovery.

**Purpose:** This is to ensure that everyone is aware of the presence of asbestos.

*Criterion to Rebut the designation of installed material as PACM (§1926.1101(k)(5))* -

*§1926.1101(k)(5)(i)* - At any time, an employer and/or building owner may demonstrate, for purposes of this standard, that PACM does not contain asbestos. Building owners and/or

employers are not required to communicate information about the presence of building material for which such a demonstration pursuant to the requirements of paragraph (k)(5)(ii) of this section has been made. However, in all such cases, the information, data and analysis supporting the determination that PACM does not contain asbestos, shall be retained pursuant to paragraph (n) of this section.

*§1926.1101(k)(5)(ii)* - An employer or owner may demonstrate that PACM does not contain more than 1 percent asbestos by the following:

§1926.1101(k)(5)(ii)(A) - Having a completed inspection conducted pursuant to the requirements of AHERA (40 CFR Part 763, Subpart E) which demonstrates that the material is not ACM; or

§1926.1101(k)(5)(ii)(B) - Performing tests of the material containing PACM which demonstrate that no ACM is present in the material. Such tests shall include analysis of bulk samples collected in the manner described in 40 CFR 763.86. The tests, evaluation and sample collection shall be conducted by an accredited inspector or by a CIH. Analysis of samples shall be performed by persons or laboratories with proficiency demonstrated by current successful participation in a nationally recognized testing program such as the National Voluntary Laboratory Accreditation Program (NVLAP) or the National Institute for Standards and Technology (NIST) or the Round Robin for bulk samples administered by the American Industrial Hygiene Association (AIHA) or an equivalent nationally-recognized round robin testing program.

**Purpose:** This is to ensure that asbestos hazards are properly recognized.

*Warning Signs (§1926.1101(k)(6))* - 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 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.

*§1926.1101(k)(7)(i)* - Warning signs that demarcate the regulated area shall be provided and displayed at each location where a regulated area is required to be established by paragraph (e) of this section. Signs shall be posted at such a distance from such a location that an employee may read the signs and take necessary protective steps before entering the area marked by the signs.

§1926.1101(k)(7)(ii)(A) - The warning signs required by paragraph (k)(7) of this section shall bear the following information. DANGER – ASBESTOS - CANCER AND LUNG DISEASE HAZARD - AUTHORIZED PERSONNEL ONLY.



§1926.1101(k)(7)(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: RESPIRATORS AND PROTECTION CLOTHING ARE REQUIRED IN THIS AREA.

§1926.1101(k)(7)(iii) - The employer shall ensure that employees working in and contiguous to regulated areas comprehend the warning signs required to be posted by paragraph (k)(7)(i) of this section. Means to ensure employee comprehension may include the use of foreign languages, pictographs and graphics.

**Purpose:** Posting warning signs serve to warn employees, who may otherwise not know, that they are entering a regulated area. Such signs would warn employees that entry is permitted only if the employee is authorized and there is a specific need to enter the area. Warning signs supplement the training which employees receive under this standard.

Labels (§1926.1101(k)(8)(i)) - Labels shall be affixed to all products containing asbestos and to all containers containing such products, including waste containers. Where feasible, installed asbestos products shall contain a visible label.

§1926.1101(k)(8)(ii) - Labels shall be printed in large, bold letters on a contrasting background.

§1926.1101(k)(8)(iii) - Labels shall be used in accordance with the requirements of 29 CFR 1910.1200(f) of OSHA's Hazard Communication standard, and shall contain the following information: DANGER - CONTAINS ASBESTOS FIBERS - AVOID CREATING DUST - CANCER AND LUNG DISEASE HAZARD.

§1926.1101(k)(8)(v) - Labels shall contain a warning statement against breathing asbestos fibers.

**Purpose:** Warning labels assure that downstream employers and employees are informed of the associated hazards with asbestos and that special practices may need to be implemented to insure against exposure. Furthermore, hazard labels alert other employers who, in the absence of such labels, might not know that asbestos is present in their workplace and that they have incurred obligation of complying with the standard. To ensure employees comprehend the labels, the employer may include the use of foreign languages, pictographs, and graphics.

*Employee Information and Training (§1926.1101(k)(9))*

§1926.1101(k)(9)(i) - The employer shall, at no cost to the employee, institute a training program for all employees who are likely to be exposed in excess of a PEL and for all employees who perform Class I through IV asbestos operations, and shall ensure their participation in the program.

§1926.1101(k)(9)(ii) - Training shall be provided prior to or at the time of initial assignment and at least annually thereafter.

*§1926.1101(k)(9)(iii)* - Training for Class I operations and for Class II operations that require the use of critical barriers (or equivalent isolation methods) and/or negative pressure enclosures under this section shall be the equivalent in curriculum, training method and length to the EPA Model Accreditation Plan (MAP) asbestos abatement workers training (40 CFR Part 763, subpart E, appendix C).

*§1926.1101(k)(9)(iv)* - Training for other Class II work.

§1926.1101(k)(9)(iv)(A) - For work with asbestos containing roofing materials, flooring materials, siding materials, ceiling tiles, or transite panels, training shall include at a minimum all the elements included in paragraph (k)(9)(viii) of this section and in addition, the specific work practices and engineering controls set forth in paragraph (g) of this section which specifically relate to that category. Such course shall include "hands-on" training and shall take at least 8 hours.

§1926.1101(k)(9)(iv)(B) - An employee who works with more than one of the categories of material specified in paragraph (k)(9)(iv)(A) of this section shall receive training in the work practices applicable to each category of material that the employee removes and each removal method that the employee uses.

§1926.1101(k)(9)(iv)(C) - For Class II operations not involving the categories of material specified in paragraph (k)(9)(iv)(A) of this section, training shall be provided which shall include at a minimum all the elements included in paragraph (k)(9)(viii) of this section and in addition, the specific work practices and engineering controls set forth in paragraph (g) of this section which specifically relate to the category of material being removed, and shall include "hands-on" training in the work practices applicable to each category of material that the employee removes and each removal method that the employee uses.

*§1926.1101(k)(9)(v)* - Training for Class III employees shall be consistent with EPA requirements for training of local education agency maintenance and custodial staff as set forth at 40 CFR 763.92(a)(2). Such a course shall also include "hands-on" training and shall take at least 16 hours. Exception: For Class III operations for which the competent person determines that the EPA curriculum does not adequately cover the training needed to perform that activity, training shall include as a minimum all the elements included in paragraph (k)(9)(viii) of this section and in addition, the specific work practices and engineering controls set forth in paragraph (g) of this section which specifically relate to that activity, and shall include "hands-on" training in the work practices applicable to each category of material that the employee disturbs.

*§1926.1101(k)(9)(vi)* - Training for employees performing Class IV operations shall be consistent with EPA requirements for training of local education agency maintenance and custodial staff as set forth at 40 CFR 763.92(a)(1). Such a course shall include available

information concerning the locations of thermal system insulation and surfacing ACM/PACM, and asbestos-containing flooring material, or flooring material where the absence of asbestos has not yet been certified; and instruction in recognition of damage, deterioration, and delamination of asbestos containing building materials. Such course shall take at least 2 hours.

§1926.1101(k)(9)(vii) - Training for employees who are likely to be exposed in excess of the PEL and who are not otherwise required to be trained under paragraph (k)(9)(iii) through (vi) of this section, shall meet the requirements of paragraph (k)(9)(viii) of this section.

§1926.1101(k)(9)(viii) - The training program shall be conducted in a manner that the employee is able to understand. In addition to the content required by provisions in paragraphs (k)(9)(iii) through (vi) of this section, the employer shall ensure that each such employee is informed of the following:

§1926.1101(k)(9)(viii)(A) - Methods of recognizing asbestos, including the requirement in paragraph (k)(1) of this section to presume that certain building materials contain asbestos;

§1926.1101(k)(9)(viii)(B) - The health effects associated with asbestos exposure;

§1926.1101(k)(9)(viii)(C) - The relationship between smoking and asbestos in producing lung cancer;

§1926.1101(k)(9)(viii)(D) - The nature of operations that could result in exposure to asbestos, the importance of necessary protective controls to minimize exposure including, as applicable, engineering controls, work practices, respirators, housekeeping procedures, hygiene facilities, protective clothing, decontamination procedures, emergency procedures, and waste disposal procedures, and any necessary instruction in the use of these controls and procedures; where Class III and IV work will be or is performed, the contents of EPA 20T-2003, "Managing Asbestos In-Place" July 1990 or its equivalent in content;

§1926.1101(k)(9)(viii)(E) - The purpose, proper use, fitting instructions, and limitations of respirators as required by 29 CFR 1910.134;

§1926.1101(k)(9)(viii)(F) - The appropriate work practices for performing the asbestos job;

§1926.1101(k)(9)(viii)(G) - Medical surveillance program requirements;

§1926.1101(k)(9)(viii)(H) - The content of this standard including appendices;

§1926.1101(k)(9)(viii)(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 J to this section, to comply with this requirement; and

1926.1101(k)(9)(viii)(J) - The requirements for posting signs and affixing labels and the meaning of the required legends for such signs and labels.

**Purpose:** Training is essential to inform employees of the hazards to which they are exposed and to provide employees with the necessary understanding of the degree to which they themselves can minimize the health hazard potential. Training serves to explain and reinforce the information presented to employees on signs, labels and MSDS's. These written forms of information and warning will be successful and relevant only when employees understand the information presented and are aware of the actions to be taken to avoid or minimize exposures.

Training provides information to the employee to enable them to be able to recognize how and where he or she might be occupationally exposed and what steps should be taken to limit exposure. Workers must be provided information on location, use, and work practices.

#### **H. Medical examinations and consultations (§1926.1101(m)(2))**

§1926.1101(m)(2)(i) - The employer shall make available medical examinations and consultations to each employee covered under paragraph (m)(1)(i) of this section on the following schedules:

§1926.1101(m)(2)(i)(A) - Prior to assignment of the employee to an area where negative-pressure respirators are worn;

§1926.1101(m)(2)(i)(B) - When the employee is assigned to an area where exposure to asbestos may be at or above the permissible exposure limit for 30 or more days per year, or engage in Class I, II, or III work for a combined total of 30 or more days per year, a medical examination must be given within 10 working days following the thirtieth day of exposure;

§1926.1101(m)(2)(i)(C) - And at least annually thereafter.

§1926.1101(m)(2)(i)(D) - If the examining physician determines that any of the examinations should be provided more frequently than specified, the employer shall provide such examinations to affected employees at the frequencies specified by the physician.

§1926.1101(m)(2)(i)(E) - Exception: No medical examination is required of any employee if adequate records show that the employee has been examined in accordance with this paragraph within the past 1-year period.

*§1926.1101(m)(2)(ii)* - Medical examinations made available pursuant to paragraphs (m)(2)(i)(A) through (m)(2)(i)(C) of this section shall include:

§1926.1101(m)(2)(ii)(A) - A medical and work history with special emphasis directed to the pulmonary, cardiovascular, and gastrointestinal systems.

§1926.1101(m)(2)(ii)(B) - On initial examination, the standardized questionnaire contained in Part 1 of Appendix D to this section, and, on annual examination, the abbreviated standardized questionnaire contained in Part 2 of Appendix D to this section.

§1926.1101(m)(2)(ii)(C) - A physical examination directed to the pulmonary and gastrointestinal systems, including a chest roentgenogram to be administered at the discretion of the physician, and pulmonary function tests of forced vital capacity (FVC) and forced expiratory volume at one second (FEV(1)). Interpretation and classification of chest shall be conducted in accordance with Appendix E to this section.

§1926.1101(m)(2)(ii)(D) - Any other examinations or tests deemed necessary by the examining physician.

**Purpose:** Medical examinations and the related information collection requirements provide continuous monitoring of the health of potentially exposed employees. Records of medical examinations are used by physicians who must periodically examine employees exposed to asbestos. Without records of previous medical examinations, the physician may not be able to determine whether an employee has suffered adverse health effects since his or her last examination. Further, when symptoms of organ damage appear, the physician often needs information as to the patient's previous medical conditions to make an accurate diagnosis of the new problem, its apparent cause, and the course of treatment required.

Medical records are also designed so that employees can determine whether or not treatment is needed for occupational exposures.

The maintenance period for records regarding employee health is necessary because of the lengthy latency periods associated with the manifestation of disease due to exposure to asbestos.

### **Information provided to physician (§1926.1101(m)(3))**

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

*§1926.1101(m)(3)(i)* - A copy of this standard and Appendices D, E, and I to this section;

*§1926.1101(m)(3)(ii)* - A description of the affected employee's duties as they relate to the employee's exposure;

§1926.1101(m)(3)(iii) - The employee's representative exposure level or anticipated exposure level;

§1926.1101(m)(3)(iv) - A description of any personal protective and respiratory equipment used or to be used; and

§1926.1101(m)(3)(v) - Information from previous medical examinations of the affected employee that is not otherwise available to the examining physician.

**Purpose:** Making the required information available to the physician will aid in the evaluation of the employee's health and fitness for particular asbestos exposed job assignment.

*Physician's written opinion (§1926.1101(m)(4))*

§1926.1101(m)(4)(i) - The employer shall obtain a written opinion from the examining physician. This written opinion shall contain the results of the medical examination and shall include:

§1926.1101(m)(4)(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;

§1926.1101(m)(4)(i)(B) - Any recommended limitations on the employee or on the use of personal protective equipment such as respirators; and

§1926.1101(m)(4)(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 that may result from asbestos exposure.

§1926.1101(m)(4)(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.

§1926.1101(m)(4)(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.

§1926.1101(m)(4)(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 placement of employees and to assess the employee's ability to use protective clothing and equipment. The requirement that an employee be provided a copy of the physician's written

opinion will ensure that the employee is informed of the results of the medical examination.

## **I. Recordkeeping (§1926.1101(n))**

### *Objective Data (§1926.1101(n)(1))*

Employers relying on objective data showing that products made from or containing asbestos will not expose employees to asbestos in excess of the PELs must establish and maintain an accurate record. This record must contain the elements as stated in paragraph (n)(1) of the standard.

**Purpose:** The purpose of requiring an employer to document objective data determinations and retain them is to discourage abuse of this provision since employees and their representatives are permitted access to this information. Access enables employees and their representatives to ensure that the exemption determination is a reasonable one, thereby encouraging use of objective data determinations only in cases where the data warrant such use. Maintaining a record of the objective data determinations will permit OSHA to ascertain whether compliance with the standard has been achieved.

### *Exposure monitoring (§1926.1101(n)(2))*

§1926.1101(n)(2)(i) - The employer shall keep an accurate record of all measurements taken to monitor employee exposure to asbestos as prescribed in paragraph (f) of this section. NOTE: The employer may utilize the services of competent organizations such as industry trade associations and employee associations to maintain the records required by this section.

§1926.1101(n)(2)(ii) - This record shall include at least the following information:

§1926.1101(n)(2)(ii)(A) - The date of measurement;

§1926.1101(n)(2)(ii)(B) - The operation involving exposure to asbestos that is being monitored;

§1926.1101(n)(2)(ii)(C) - Sampling and analytical methods used and evidence of their accuracy;

§1926.1101(n)(2)(ii)(D) - Number, duration, and results of samples taken;

§1926.1101(n)(2)(ii)(E) - Type of protective devices worn, if any; and

§1926.1101(n)(2)(ii)(F) - Name, social security number, and exposure of the employees whose exposures are represented.

§1926.1101(n)(2)(iii) - The employer shall maintain this record for at least thirty (30) years, in accordance with 29 CFR 1910.20.

*Medical surveillance (§1926.1101(n)(3))*

§1926.1101(n)(3)(i) - The employer shall establish and maintain an accurate record for each employee subject to medical surveillance by paragraph (m) of this section, in accordance with 29 CFR 1910.20.

§1926.1101(n)(3)(ii) - The record shall include at least the following information:

§1926.1101(n)(3)(ii)(A) - The name and social security number of the employee;

§1926.1101(n)(3)(ii)(B) - A copy of the employee's medical examination results, including the medical history, questionnaire responses, results of any tests, and physician's recommendations.

§1926.1101(n)(3)(ii)(C) - Physician's written opinions;

§1926.1101(n)(3)(ii)(D) - Any employee medical complaints related to exposure to asbestos; and

§1926.1101(n)(3)(ii)(E) - A copy of the information provided to the physician as required by paragraph (m) of this section.

§1926.1101(n)(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 1910.20.

**Purpose:** The employer benefits by keeping these records, since the information will enable the employer to better ensure that employees are not being overexposed; such information may alert the employer that steps must be initiated in order to reduce exposures. It is necessary to keep these records for extended periods of time because of the long latency period commonly associated with carcinogenesis. Cancer often cannot be detected until 20 or more years after first exposure.

*Training records (§1926.1101(n)(4))*

The employer shall maintain all employee training records for one (1) year beyond the last date of employment by that employer.

**Purpose:** Maintaining training programs/materials provides a resource for an employee to refresh his or her training should they need it during the year. Retaining records of training demonstrates to OSHA, that the employer has been conducting annual training.



*Data to rebut PACM (§1926.1101(n)(5))*

Where the building owner and employer have relied on data to demonstrate that PACM is not asbestos-containing, such data shall be maintained for as long as they are relied upon to rebut the presumption.

**Purpose:** To ensure that all PACMs are properly distinguished from ACMs. This is important in the communications of asbestos hazards to both employers and employees.

*Records of required notification (§1926.1101(n)(6))*

Where the building owner has communicated and received information concerning the identification, location and quantity of ACM and PACM, written records of such notifications and their content shall be maintained by the building owner for the duration of ownership and shall be transferred to successive owners of such buildings/facilities.

**Purpose:** This is to ensure that any new owners of such buildings are aware of the presence of asbestos.

*Availability (§1926.1101(n)(7))*

§1926.1101(n)(7)(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.

§1926.1101(n)(7)(ii) - The employer, upon request, shall make any exposure records required by paragraphs (f) and (n) of this section available for examination and copying to affected employees, former employees, designated representatives, and the Assistant Secretary, in accordance with 29 CFR 1910.20(a) through (e) and (g) through (i).

§1926.1101(n)(7)(iii) - The employer, upon request, shall make employee medical records required by paragraphs (m) and (n) of this section available for examination and copying to the subject employee, anyone having the specific written consent of the subject employee, and the Assistant Secretary, in accordance with 29 CFR 1910.20.

**Purpose:**

*Transfer of records (§1926.1101(n)(8))*

§1926.1101(n)(8)(i) - The employer shall comply with the requirements concerning transfer of records set forth in 29 CFR 1910.20(h).

§1926.1101(n)(8)(ii) - Whenever the employer ceases to do business and there is no successor employer to receive and retain the records for the prescribed period, the employer shall notify the Director at least 90 days prior to disposal and, upon request, transmit them to the Director.

**Purpose:** Records that have been transferred may be used for research purposes. In addition, by having employee records submitted to NIOSH, NIOSH serves as a repository. Employees may then be able to access their records if needed for health or 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 burden.**

Employers may use improved information technology when establishing and maintaining exposure-monitoring and medical-surveillance records. OSHA wrote the paperwork requirements of the Regulation 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 for the purposes described in Item 2 above.**

The information required to be collected and maintained is specific to each employer and employee 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 (Item 5 of OMB Form 83-I), describe any methods used to minimize burden.**

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

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

The information collection frequencies specified by 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 construction.

- 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: information unless the agency can demonstrate that it has instituted procedures to protect 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 the information's confidentiality to the extent permitted by law.**

Under paragraph (f)(5) of the Standard, employers must inform employees, either individually in writing or by posting the exposure monitoring results, as soon as possible but no later than 5 working days after receipt of the results.

In accordance with paragraph (k)(3)(iii), once an employer has completed work subject to this standard, the employer must inform building/facility owner and any employers whose employees may be working in the area, of the current location and quantity of PACM and/or ACM that is remaining in the former regulated area and final monitoring results if any, within 10 days of completion of such work.

Paragraph (k)(4) requires, 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, within 24 hours. This is also to ensure that everyone is aware that the toxin 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 3 years -- even if the collection of information activity is the same as in prior periods. There may be circumstances that may preclude consultation in a specific situation. These circumstances should be explained.**

As required by the Paperwork Reduction Act of 1995 (U.S.C. 3506(c)(2)(A)), OSHA published a notice in the **Federal Register** on October 17, 2008 (73 FR 61913, Docket No.OSHA-2008-0039) requesting public comment on its extension of the information collection requirements contained in the Asbestos in Construction (29 CFR 1926.1101). This notice was part of a preclearance consultation program intended to provide those interested parties the opportunity to comment on OSHA's request for an extension by the Office of Management and Budget (OMB) of a previous approval of the information collection requirements found in the above standard. To date, the Agency has not received any comments on its notice.

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

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

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

To ensure that the personal information contained in medical records remains confidential, OSHA developed 29 CFR 1913.10 to regulate access to these records.

- 11. Provide additional justification for any questions of a sensitive nature, such as sexual behavior and attitudes, religious beliefs, and other matters that are commonly considered private. This justification should include the 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 taken to obtain their consent.**

There are no provisions in this standard requiring that questions of a sensitive nature be asked; therefore, this question is not applicable.

- 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 in Item 13 of OMB Form 83-I.**
- **Provide estimates of annualized cost to respondents for the hour burdens for collections of**

information, identifying and using appropriate wage rate categories.

## **Annual Burden Hour and Cost Determinations**

The initial development of the industry profile of affected establishments and workers began with a delineation of the different types of construction activities involving exposure to asbestos. This identification process was based on extensive review of the occupational health literature describing where exposure to asbestos typically occurs, and was augmented and refined from conversations with industry and labor experts. Information was also gained by a series of surveys of building owners and contractors (performed by CONSAD in its rulemaking support for OSHA in 1984) and from information submitted to the public record in the course of various rulemaking activities.

Once the different types of construction activities were identified, the numbers of establishments, workers, and projects were estimated for each activity. A wide variety of approaches and data sources, reflecting the range of construction activities included in the analysis, were used to first ascertain the general level of construction activity involving exposure to asbestos products. For example, for new construction activities, the annual consumption of different types of products containing asbestos was used. For asbestos abatement, encapsulation, and demolition activities, the annual number of building permits involving asbestos abatement work, coupled with estimates of the numbers of abatement and demolition contractors believed to perform this type of work were utilized. For general building renovation and remodeling activities, the amount of a particular construction products (for example, drywall or roofing products) installed or removed annually, or the number of buildings containing asbestos products (for example, drywall or roofing products) installed or removed annually, or the number of buildings containing asbestos products (for example flooring products) were used.

For routine maintenance work and custodial activities in commercial and residential buildings, the number of buildings containing different maintenance work and custodial activities in general industry, the number of establishments in those industrial sectors that typically either use asbestos-containing products (such as gaskets or insulation) during repair, work, and/or perform other maintenance or custodial activities involving contact with asbestos-containing products were used.

In addition, with each of the above construction activities, a characterization of a typical project was also needed. Much of the information for these project characterizations came from conversations with industry and labor experts, as well as from information gained from a series of surveys of building owners and contractors performed by the contractor, CONSAD, in 1984 in its rulemaking support for OSHA. The pertinent information included data such as the average amount of asbestos products used or removed on a typical project, the typical frequency with which a construction activity took place in a building, the average number of crews (and crew sizes) needed to perform each type of construction activity, the average duration of each type of activity, the normal duration of the construction season for each type of activity, and the percentage of the work year that construction firms spend performing each type of construction activity involving asbestos exposure.

For certain types of construction renovation/remodeling activities (for example, the removal of building roofing materials or the removal of asbestos floor products), the data suggested that the frequency of performing work on the same structure is often once every 20 - 30 years. For other routine maintenance activities (for example, the repair of ceiling tiles, drywall, flooring, plumbing, or work on boilers), the activities are ongoing on an annual basis and exposures to asbestos would not end unless all asbestos in a structure was removed or unless asbestos-containing products were no longer used.

To update the economic statistics, OSHA analyzed the Final Regulatory Impact Analysis (RIA) for the Revised Asbestos Standard for Construction, General Industry and Shipyards published July 21, 1994. This document provides comprehensive discussion of the number of firms and employees working in specific construction activities as covered the Asbestos in Construction Standard.

OSHA reviewed the six general activities where employees could be exposed in construction; new construction, asbestos abatement and demolition, renovation and remodeling, routine maintenance in public, commercial and residential buildings, routine maintenance in industrial facilities, custodial work in public commercial and residential buildings, and custodial work in industrial facilities. OSHA reviewed sources such as the U.S. Department of Labor, Bureau of Labor Statistics, Occupational Outlook Handbook, 2008-2009 edition; U.S. Census Bureau. 2002 Economic Census, Subject Series, Establish and Firm size; and the U.S. Census Bureau. American Housing Survey. In summary, OSHA estimates the number of workers potentially exposed to asbestos during new construction, abatement, renovation, routine maintenance work and custodial activities declined approximately 11% since 1994.

## **Wage Rates**

The following hourly wage rates for the relevant occupational categories have been derived from the National Compensation Survey (NCS), published by the Bureau of Labor Statistics. These wages have been adjusted to reflect the fact that fringe benefits comprise roughly 29.4 percent of total employee compensation in the private sector. The costs of labor used in this analysis are therefore estimates of total hourly compensation. These hourly wages are:

- Professional/Manager: \$40.51
- Production Supervisor: \$33.53
- Employee: \$27.62
- Clerical/Secretary: \$25.35

**Table 1 - Summary of Burden Hours and Costs**

<b>Information Collection Requirement</b>	<b>Current Burden Hours</b>	<b>Requested Burden Hours</b>	<b>Change</b>	<b>Estimated Cost</b>
<b>A. Multi-employer worksites</b>	68,837	61,265	-7,572	\$1,553,068
<b>B. Regulated areas</b>	0	0	0	\$0
<b>C. Exposure assessments and monitoring</b>	860,598	765,948	-94,650	\$25,682,237
Notification of monitoring results	68,837	61,265	-7,572	\$1,553,068
<b>D. Methods of compliance</b>	769	686	-83	\$27,790
<b>E. Respirator program</b>	0	0	0	\$0
Respirator fit testing	0	0	0	\$0
<b>F. Laundering protective clothing</b>	0	0	0	\$0
<b>G. Communication of hazards</b>				
Duties of bldg. and facility owners	1,450,328	1,290,792	-159,536	\$43,280,256
Duties of employers	1,691,744	1,505,652	-186,092	\$50,484,511
Criterion to rebut PACM	0	0	0	\$0
Warning signs and labels	0	0	0	\$0
Employee information and training	359,452	319,912	-39,540	\$9,596,605
<b>H. Medical surveillance</b>				
Medical examinations	195,700	174,172	-21,528	\$4,810,631
Medical questionnaires (Part I)	10,872	9,676	-1,196	\$267,251
Medical questionnaires (Part II)	18,483	16,450	-2,033	\$454,349
Information provided to physician	10,437	9,289	-1,148	\$235,476
Physicians written opinion	10,437	9,289	-1,148	\$235,476
<b>I. Recordkeeping</b>				
Objective data records	91,783	81,687	-10,096	\$2,070,765
Exposure & medical records	79,285	70,565	-8,720	\$1,788,823
Training records	2,728	2,428	-300	\$61,550
Records to rebut PACM	0	0	0	\$0
Records of notification	644,590	573,685	-70,905	\$14,542,915
Employee access to records	4,744	4,222	-522	\$107,028

<b>Federal access</b>	30	286	256	\$11,586
<b>Transfer of records</b>	4	4	0	\$101
<b>Total</b>	<b>5,569,658</b>	<b>4,957,808</b>	<b>-611,850</b>	<b>\$156,763,486</b>

**A. Multi-employer worksites (§1926.1101(d))**

On multi-employer worksites, employers performing work requiring the establishment of a regulated area must inform other employers on site of the nature of the employer's work with asbestos and/or PACM, of the existence of and requirements pertaining to the regulated areas, and of the measures taken to ensure that employees of other employers are not being exposed to asbestos. Notifying other employers takes place after the exposure assessment and monitoring and can be done by posting the information. OSHA estimates that 20% of 1,276,353 employers, 255,271 employers, conduct exposure monitoring sampling three times annually. Posting of each notification would take 5 minutes (0.08 hour) of secretarial time.

**Burden hours:** 255,271 employers × 3 notifications annually × 0.08 hour = 61,265 hours

**Cost:** 61,265 hours × \$25.35 = \$1,553,068

**B. Regulated areas (§1926.1101(e))**

All class I, II and III asbestos work is to be conducted within regulated areas and such areas must be demarcated. Employers may use signs as prescribed in section (k) of the standard. Burden for this activity is therefore addressed in that section.

**C. Exposure Assessments and monitoring (§1926.1101(f))**

Initial assessments and monitoring

OSHA estimates that 1,276,353 employers conduct exposure assessments, and that 80% of these employers use means other than exposure-monitoring (sampling), i.e., objective data, prior sampling, etc. to demonstrate compliance with the PEL. The remaining 20% of the employers, 255,271 employers, conduct either initial, or in some cases, additional exposure monitoring of the job sites. These employers take an average of three samples annually and each sample takes a supervisor 1 hour to collect and mail the sample off for analysis.

**Burden hours:** 255,271 employers × 3 samples per year × 1 hour = 765,813 hours

**Cost:** 765,813 hours × \$33.53 = \$25,677,710

Periodic monitoring

In addition to initial monitoring, employers must conduct periodic monitoring at various times when workers are being exposed above the PELs. However, it has been assumed that no periodic monitoring will occur. Monitoring is expensive and it is more beneficial for employers to take other measures to ensure compliance with the PELs such as equipping employees with supplied-air respirators and following control methods outlined in the standard. Employers use the least burdensome method to



comply with exposure provisions and therefore no burden has been taken for periodic monitoring.

Monitoring triggered by alternative control methods for Class I work (§1926.1101(g)(6)(iii))

The Agency assumes that 45 employers monitor their workplace due to this provision. Therefore, using similar assumptions, as previously stated in the initial exposure/assessment, the burden is as follows:

**Burden hours:**  $45 \text{ employers} \times 3 \text{ sample/yr} \times 1 \text{ hour per sample} = 135 \text{ hours}$   
**Cost:**  $135 \text{ hours} \times \$33.53 = \$4,527$

Notification of monitoring results (§1926.1101(f)(5))

The Agency assumes employers will post the monitoring results in a central location. This takes require 5 minutes (0.08 hour) of secretarial time, thus the burden and associated cost is as follows:

**Burden hours:**  $(1,276,353 \text{ employers} \times 20\%) \times 3 \text{ samples/year} \times 0.08 \text{ hour} = 61,265 \text{ hours}$   
**Cost:**  $61,265 \text{ hours} \times \$25.35 = \$1,553,068$

**D. Methods of compliance (§1926.1101(g))**

Provisions contained in this paragraph of the regulation require employers to use prescribed engineering controls and work practices, including monitoring and notifying employers of findings ((g)(4)(ii)(B)). The burden for this requirement is included under the exposure monitoring section or the methods of compliance section for alternate methods of compliance in the paperwork package (see narrative below).

The standard prescribes work practices for various operations involving asbestos. However, employers involved with Class I and II operations may choose to use an alternate control method. The paperwork burden for this requirement follows.

OSHA estimates seven employers will choose new or modified control technology to reduce exposures in Class I asbestos work. OSHA estimates that a manager takes, one hour and 50 minutes to develop the alternative control methods.

**Burden hours:**  $7 \text{ notifications} \times 1.83 \text{ hours} = 13 \text{ hours}$   
**Costs:**  $13 \text{ hours} \times \$40.51 = \$527$

Additional controls for Class II work

Since new or other control technology is most likely to be more expensive, OSHA assumes that 1% of the 67,276 employers performing Class II operations or 673 employers use another method and incur paperwork burden. OSHA estimates it takes 1 hour to conduct an evaluation of a Class II operation; therefore the burden is as follows:

**Burden hours:**  $673 \text{ employers} \times 1 \text{ time per year} \times 1 \text{ hour} = 673 \text{ hours}$   
**Costs:**  $673 \text{ hours} \times \$40.51 = \$27,263$

**E. Respiratory protection (§1926.1101(h))**

### Respirator program

The standard requires the employer to institute a respiratory protection program in accordance with 29 CFR 1910.134. There will be no burden taken for this requirement. The burden is taken in the paperwork package for §1910.134 (OMB Control Number 1218-0099).

### Respirator fit-testing

Since the December 3, 1997, OMB approval of this information collection request, OSHA published a Respiratory Protection final rule (January 8, 1998 (63 FR 1152)). OSHA consolidated the fit-testing burden hours and costs into the Respirator Standard, which has OMB clearance under the number 1218-0099.

### **F. Laundering protective clothing (§1926.1101(i)(2)(ii))**

The standard requires that the employer inform any person who launders or cleans asbestos-contaminated protective clothing of the potential asbestos hazard. In the Regulatory Impact Analysis, it was assumed that all affected employers will provide their employees with disposable clothing, which requires no laundering. Therefore, no burden has been taken for this provision.

### **G. Communication of hazards (§1926.1101(k))**

Under this section, building and facility owners, along with employers of potentially exposed employees, must convey specific information to building tenants, employees and other employers/contractors regarding the location of ACM and PACM in their work environment. Burden for this activity follows.

#### Duties of building and facility owners

#### Identification of ACM/PACM and notification by building owners to their employees and tenants

OSHA assumes an average of 60% of 11,951,780 projects or 7,171,068 projects will involve communication between building owners and their employees and tenants. OSHA estimates that a facility owner takes a maximum of 45 minutes (0.75 hour) to evaluate high risk jobs and five minutes (.08 hour) to notify persons. A facility owner takes 5 minutes (0.08 hour) to evaluate low risk jobs and another 3 minutes (0.05 hour) for notifications. More jobs are in low risk category.

Using these assumptions and estimates of time a weighted average, of 0.13 hour (8 minutes) was used; thus the burden is as follows:

**Burden hours:** 7,171,068 projects × 0.13 hour = 932,239 hours

**Cost:** 932,239 hours × \$33.53 = \$31,257,974

#### Notification by building owners to contractors (other employers)

Building owners take 3 minutes (0.05 hour) to notify contractors. The universe is the same as above (7,171,068 projects); thus the burden is as follows:

**Burden hours:**  $7,171,068 \text{ projects} \times 0.05 \text{ hour} = 358,553 \text{ hours}$   
**Cost:**  $358,553 \text{ hours} \times \$33.53 = \$12,022,282$

Therefore, the total burden hours for “Duties of building and facility owners” is **1,290,792** hours (932,239 + 358,553, and the total cost is of **\$43,280,256** (\$31,257,974 + \$12,022,282).

#### Duties of employers

##### Identification of ACM/PACM and notification by contractors to building owners

Time to identify/document and notify owners of ACM/PACM in high risk projects takes no longer than in low risk projects, and there are more jobs in low risk areas. Further, there may be some overlap in the counting of building owner notification to contractors in this provision. Taking these assumptions into account, the RIA estimated that the weighted time for this provision is 0.05 hours. The number of projects and compliance rate is the same as above.

**Burden hours:**  $7,171,068 \times 0.05 \text{ hour} = 358,553 \text{ hours}$   
**Cost:**  $385,533 \text{ hours} \times \$33.53 = \$12,022,282$

##### Notification by contractors to employees and employers

The time to notify employees and other employers at the project takes approximately 5 minutes (0.08 hour). The number of projects and compliance rate is the same as above.

**Burden hours:**  $7,171,068 \text{ projects} \times 0.08 \text{ hour} = 573,685 \text{ hours}$   
**Cost:**  $573,685 \text{ hours} \times \$33.53 = \$19,235,658$

##### Notification by contractors to owners on asbestos remaining in the building

Within 10 days after a job is completed, employers whose employees have performed the asbestos work must inform the building owners of remaining asbestos. OSHA assumes that some of the job sites involve new construction and therefore the number of this type of notification is less than the projects above, i.e. (60% of 11,946,119 projects) because once a job is completed, the asbestos products would be intact and would not result in friable conditions that would require notification. The compliance rate is the same as above. OSHA estimates a contractor takes 5 minutes, 0.08 hr, to perform this notification.

**Burden hours:**  $7,167,671 \text{ projects} \times 0.08 \text{ hour} = 573,414 \text{ hours}$   
**Cost:**  $573,414 \text{ hours} \times \$33.53 = \$19,226,571$

In addition to the above requirements, 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 work site, within 24 hours of the discovery. The burden for this activity has been accounted for in the above notification

estimates.

Therefore, the total burden hours for “Duties for employers” is **1,505,652 hours** (358,553 + 573,685 + 573,414) and the total cost is **\$50,484,511** (\$12,022,282 + \$19,235,658 + \$19,226,571).

#### Criteria to rebut the designation of installed material as PACM

This evaluation was to be conducted for buildings constructed before 1981. The evaluation was for one time only. Therefore, the Agency assumes that all buildings before 1981 have been evaluated and burden has been taken in previous information collection requests; thus no burden will be incurred for this provision.

#### Warning signs

The paragraph requires that warning signs be posted and displayed at each regulated area. The standard provides the language to be included on the signs, therefore no burden is assumed for this provision.

#### Labels

Employers must affix labels to all products containing asbestos and to all containers containing such products. The standard provides the language to be included on the labels, therefore no burden is assumed for this provision.

#### Employee information and training (Qualified Person Training)

The length and type of training will vary from employee to employee. The RIA assumes that 31% of the 1,631,752 employees or 505,843 employees are trained annually. Ranges for turnover (1.1 to 1.3), training length (2 hours to 32 hours), and compliance rate (15% to 75%) are assumed. Other variables included the fact that some employers were already providing this training under EPA regulations and a greater number of employees receive the shorter-length training course. To address these ranges and variables, various components were weighted resulting in a weighted average 1.2 turnover rate, and a weighted average of 6.3 hours per training session. Further, OSHA assumes that 20 employees attend per training sessions.

**Burden hours:** (505,843 employees ) 20 sessions) × 1.2 turnover rate × 1 time per year × 6.3 hours = 191,209 hours

**Cost:** 191,209 hours × \$27.62 = \$5,281,193

In addition to training of employees for Class I, II, III & IV operations, the standard (1926.1101(o)) requires employers to provide training for competent persons. The training method and length vary depending on the nature of the competent person's work. For example, in Class I and II asbestos work, the competent person must be trained in all aspects of asbestos removal and handling. Competent persons involved in Class III and IV asbestos work must receive training equivalent in curriculum and training method to the 16-hour Operations and Maintenance course developed by EPA for maintenance and custodial workers. The RIA assumes that 20% of 743,951 competent persons or 148,790 competent persons are trained in 20-person training sessions. Ranges were identified for non-compliance rates (15% to 65%) and training hours (16 to 40 hours). These were weighted and 17.3 hours per training sessions is used to calculate the burden.

**Burden hours:** (148,790 qualified persons ) 20 sessions) × 1 per year × 17.3 hrs = 128,703 hours  
**Cost:** 128,703 hours × \$33.53 = \$4,315,412

## **H. Medical surveillance (§1926.1101(m))**

### Medical examinations

OSHA estimates 22% of 439,829 employees, 96,762 employees, require examinations annually, and it takes an estimated 1.5 hours of employee time per examination (this includes 30 minutes of travel time). An employee turnover rate (current and new employees) of 1.2 and a .22 (22%) non-compliance rate are also considered in the calculation.

**Burden hours:** 96,762 employees × 1.2 turnover rate × 1 per year × 1.5 hour = 174,172 hours  
**Cost:** 174,172 hours × \$27.62 = \$4,810,631

### Medical questionnaire (§1926.1101(m)(2)(ii)(B)) Part I

As part of the initial examination, Part I of a medical questionnaire is administered. OSHA estimates it takes 30 minutes (0.50 hour) per questionnaire for each new employee to complete the questionnaire. The number of new employees is based on a 20% turnover rate for employees, and 22% of 439,829 employees or 96,762 employees subject to medical surveillance.

**Burden hours:** 96,762 employees × 20% turnover rate × 1 per year × 0.50 hour = 9,676 hours  
**Cost:** 9,676 hours × \$27.62 = \$267,251

### Medical questionnaire (§1926.1101(m)(2)(ii)(B)) Part II

As part of the medical examination, a follow-up medical questionnaire is administered for each employee. The abbreviated questionnaire takes an employee 10 minutes (0.17 hour) to complete. The number of employee examinations is based on 22% of 439,829 employees or 96,762 employees subject to medical surveillance.

**Burden hours:** 96,762 employees × 1 per year × 0.17 hour = 16,450 hours  
**Cost:** 16,450 hours × \$27.62 = \$454,349

### Information provided to the physician (§1926.1101(m)(3))

Employers must provide information to the physician for the 96,762 existing employees and, using a 20% turnover rate, for 19,352 new employees. The total number of examinations that a secretary will provide information to the physician is 116,114.

**Burden hours:** 116,114 examinations × 1 per year × 0.08 hour = 9,289 hours  
**Cost:** 9,289 hours × \$25.35 = \$235,476

### Physician's written opinion (§1926.1101(m)(4))

As stated above, the estimated number of examinations is based on the current and new employees 116,114 examinations, and 5 minutes (0.08 hour) of secretarial time.

**Burden hours:** 116,114 examinations × 1 per year × 0.08 hour = 9,289 hours  
**Cost:** 9,289 hours × \$25.35 = \$235,476

### **I. Recordkeeping (§1926.1101(n))**

The Agency estimates that it takes a secretary 5 minutes (0.08 hour) to maintain records associated with objective data, exposure monitoring, and medical records. Also a secretary takes 5 minutes to make records available to employees.

#### Objective Data

The Agency assumes that 80% of the employers will use objective data to exempt themselves from performing exposure monitoring. Therefore, the burden is as follows:

**Burden hours:** (1,276,353 × 80%) × 0.08 hour = 81,687 hours  
**Cost:** 81,687 hours × \$25.35 = \$2,070,765

#### Exposure monitoring

**Burden hours:** (1,276,353 employers × 20%) + 45) × 3 samples per year × 0.08 hour = 61,276 hours  
**Cost:** 61,276 hours × \$25.35 = \$1,553,347

#### Medical records

**Burden hours:** 96,762 examinations × 1.2 turnover rate × 1 per year × 0.08 hour = 9,289 hours  
**Cost:** 9,289 hours × \$25.35 = \$235,476

#### Training records

Note: The 1.2 turnover rate equates to (505,843 employees + (505,843 × 0.20)). Also OSHA assumes that employers maintain records of who attends sessions; not individual records for each employee.

**Burden hours:** 505,843 employees × 1.2 turnover rate ÷ 20 per session × 0.08 hour = 2,428 hours  
**Cost:** 2,428 hours × \$25.35 = \$61,550

#### Records of notifications by building owners

**Burden hours:** 7,171,068 projects × 1 time per year × 0.08 hour = 573,685 hours  
**Cost:** 573,685 hours × \$25.35 = \$14,542,915

#### Employee access to records

The Agency assumes that 10% of the employees covered by medical surveillance will request to see his/her records annually, therefore, the burden and cost associated is as follows:

**Burden hours:**  $439,829 \text{ employees} \times 10\% \times 1.2 \text{ turnover rate} \times 0.08 \text{ hour} = 4,222 \text{ hours}$   
**Cost:**  $4,222 \text{ hours} \times \$25.35 = \$107,028$

#### Federal access to records

Based on the previous ICR, OSHA estimates it conducts approximately 3,574 inspections<sup>4</sup>. A supervisor takes 5 minutes (0.08 hour) to disclose records to compliance officer, thus the burden and cost is as follows:

**Burden hours:**  $3,574 \text{ inspections} \times 0.08 \text{ hour} = 286 \text{ hours}$   
**Cost:**  $286 \text{ hours} \times \$40.51 = \$11,586$

#### Transfer of records

Whenever the employer ceases to do business and there is no successor employer to receive and retain the records for the prescribed period, the employer shall notify and transfer the records to NIOSH.

The previous ICR noted that NIOSH received 2,553 employee records from 1 employer. OSHA estimates it takes a secretary 4 hours to prepare and send these records to NIOSH. Therefore the burden is as follows

**Burden hours:**  $1 \text{ employer} \times 4 \text{ hours} = 4 \text{ hours}$   
**Costs:**  $4 \text{ hours} \times \$25.35 = \$101$

13. **Provide an estimate of the total annual cost burden to respondents or recordkeepers resulting from the collection of information. (Do not include the cost of any hour burden shown in Items 12 and 14).**
- **The cost estimate should be split into two components: (a) a total capital and start-up cost component (annualized over its expected useful life); and (b) a total operation and maintenance and purchase of services component. The estimates should take into account costs associated with generating, maintaining, and disclosing or providing the information. Include descriptions of methods used to estimate major cost factors including system and technology acquisition, expected useful life of capital equipment, the discount rate(s), and the time period over which costs will be incurred. Capital and start-up costs include, among other items, preparations for collecting information such as purchasing computers and software; monitoring, sampling, drilling and testing equipment; and record storage facilities.**
  - **If cost estimates are expected to vary widely, agencies should present ranges of cost burdens and explain the reasons for the variance. The cost of purchasing or contracting out information collection services should be a part of this cost burden estimate. In developing cost burden**

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<sup>4</sup> This determination includes NIOSH and OSHA access to the exposure and medical records specified by paragraph (n) of the Standard. OSHA determined the number of inspections by calculating an overall inspection rate of 1.4% (0.014) ( $255,271 \text{ affected employers} \times 1.4\% = 3,574$ ).

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.

### Exposure monitoring

The Agency assumes that employers incur costs for purchasing exposure monitoring supplies and analyzing monitoring samples used to monitor their employees. The Agency estimates a total cost \$16 per sample; this includes supplies used and the analysis of the sample taken.<sup>5</sup> The costs are as follows:

**Cost:** 1,276,353 employers × 20% × 3 samples per year × \$16 = \$12,252,989  
45 employers × 3 samples per year × \$16 = \$2,160

### Medical examinations

The Agency assumes that employers will incur a cost of \$138 per exam.<sup>6</sup> The total cost is as follows:

**Cost:** 96,762 employees × 1.2 turnover rate × \$138 = \$16,023,787

**TOTAL:** \$ 28,278,936

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

### Transfer of records to NIOSH

The cost to the Federal government consists of the costs associated with processing records from employers who cease to do business and have no successor to preserve and maintain employee records, or when the retention period for those records has expired and NIOSH has requested the records be transmitted to them. OSHA determines the cost by contacting NIOSH to learn how many records NIOSH

<sup>5</sup> The cost for an OSHA-accredited laboratory to analyze air monitoring samples (using the PCM NIOSH 7400 method) currently ranges from \$8.00 to \$15 per sample (for a 24 hour turnaround). In addition to the above sampling costs, 25 mm, 0.8 micron filters are needed to conduct monitoring. A box of 50, costs \$50.00, or \$1.00 per cassette. Thus total cost per sample (for analysis and cassette) is between \$9.00 and \$16.00.

<sup>6</sup> The Consumer Price Index (CPI) indicated a 6.3% increase in the price of professional medical services from 2005 to 2007. The previous ICR estimated that the cost of each medical examination was \$130; given the 6.3% increase in the price of professional medical services, it was assumed that the cost of a medical examination increased by 6.3% as well.



has received from employers in the past year. OSHA then uses this figure to estimate the number of records NIOSH will receive in the future.

According to the previous ICR, NIOSH received 2,553 records from 1 employer at a processing cost of \$4.50 per record. The total cost for processing these records is \$11,489.

### **Federal inspections**

The Agency assumes that it will take a compliance officer who earns \$36.91 per hour 10 minutes (0.17 hour) to review the records.<sup>7</sup> Therefore, the cost to the Federal Government related to inspections is as follows:

$$3,574 \text{ inspections} \times \$36.91 \times 0.17 \text{ hour} = \$22,426$$

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

The Agency is requesting a 611,850 burden hour decrease from 5,569,658 to 4,957,808 hours. Using updated data, and the fact that much of the remediation of asbestos products has likely taken place; the Agency estimates an 11% decrease in employment, from 1,833,429 employees to 1,631,752 employees, and used this 11% reduction across the board to estimate the current number of covered employers from 1,434,105 to 1,276,353 employers.

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

The information required to be collected by the Asbestos in Construction Standard 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 in ROCIS.**

OSHA is not requesting an exception to the certification statement in ROCIS.

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<sup>7</sup>This rate represents the average 2008 General Schedule (GS) hourly wage rate for a compliance officer (GS-12, Step 5) in each of the 32 geographic regions as specified by the U.S. Office of Personnel Management.