

**SUPPORTING STATEMENT FOR THE  
INFORMATION COLLECTION REQUIREMENTS IN  
THE COTTON DUST STANDARD (29 CFR 1910.1043)<sup>1</sup>  
(Office of Management and Budget Control (OMB) No. 1218-0061  
(June 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 purpose of the Occupational Safety and Health Act (“OSH Act” or “Act”) is to assure so far as possible every working man and woman in the Nation safe and healthful working conditions and to preserve our human resources” (29 U.S.C. 651). To achieve this objective, the OSH Act specifically authorizes "the development and promulgation of occupational safety and health standards" (29 U.S.C. 651). The Act states further that [t]he Secretary . . . shall prescribe such rules and regulations as [he/she] may deem necessary to carry out [his/her] responsibilities under this Act, including rules and regulations dealing with the inspection of an employer’s establishment” (29 U.S.C. 651).

The Act specifically authorizes the Occupational Safety and Health Administration (“OSHA” or “Agency”) to issue standards that “prescribe the use of labels or other appropriate forms of warning as are necessary to insure that employees are apprized of all hazards to which they are exposed, relevant symptoms and appropriate emergency treatment, and proper conditions and precautions of safe use or exposure” (29 U.S.C. 655). In addition, the OSH Act mandates that “[e]ach employer shall make, keep and preserve, and make available to the Secretary . . . such records . . . as the Secretary . . . may prescribe by regulation as necessary or appropriate for the enforcement of this Act . . .” (29 U.S.C. 657).

To protect employee health, the OSH Act authorizes the Agency to develop standards that provide for “monitoring or measuring employee exposure” to occupational hazards and “prescribe the type and frequency of medical examinations and other tests which shall be made available [by the employer] to employees exposed to such hazards . . . to most effectively determine whether the health of such employees is adversely affected by such exposure” (29 U.S.C. 655). Moreover, the Act directs the Agency to issue regulations requiring employers to maintain accurate records of employee exposures to potentially toxic materials or other harmful physical agents which are required to be monitored and measured . . .” (29 U.S.C. 657). In

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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 this standard that contain paperwork requirements; it does not provide information or guidance on how to comply with, or how to enforce, the Standard.

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 this Act as the Secretary . . . may prescribe by regulation as necessary or appropriate for the enforcement of this Act . . .” (29 U.S.C. 657). Under the authority granted by the OSH Act, the Agency promulgated its Cotton Dust Standard as 29 CFR 1910.1043 (the "Standard"). OSHA issued the Standard after determining that occupational exposure to cotton dust poses a health risk to employees. This determination showed that cotton-dust exposure results in an increased risk of developing pulmonary diseases especially byssinosis that may result in disability and premature death. Items 2 and 12 below describe in detail 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.**

#### **A. Exposure monitoring (§1910.1043(d))**

*Alternative to the vertical elutriator cotton dust sampler §1910.1043(d)(1)(iii) - If an alternative to the vertical elutriator cotton dust sampler is used, the employer shall establish equivalency by reference to an OSHA opinion or by documenting, based on data developed by the employer or supplied by the manufacturer, that the alternative sampling devices meets the following criteria:*

§1910.1043(d)(1)(iii)(A) - It collects respirable particulates in the same range as the vertical elutriator (approximately 15 microns);

§1910.1043(d)(1)(iii)(B) - Replicate exposure data used to establish equivalency are collected in side-by-side field and laboratory comparisons; and

§1910.1043(d)(1)(iii)(C) - A minimum of 100 samples over the range of 0.5 to 2 times the permissible exposure limit are collected, and 90% of these samples have an accuracy range of plus or minus 25 per cent of the vertical elutriator reading with a 95% confidence level as demonstrated by a statistically valid protocol. (An acceptable protocol for demonstrating equivalency is described in Appendix E of this section.)

**Purpose:** Obtaining an OSHA opinion or developing documentation to meet the specified criteria provides assurance to employees that the alternative sampler used by an employer is as accurate in collecting cotton dust samples as the vertical elutriator.

*Initial monitoring §1910.1043(d)(2) - Each employer who has a place of employment within the scope of paragraph (a)(1), (a)(4), or (a)(5) of this section shall conduct monitoring by obtaining measurements which are representative of the exposure of all employees to airborne concentrations of lint-free respirable cotton dust over an eight-hour period. The sampling program shall include at least one determination during each shift for each work area.*

**Purpose:** Such monitoring allows employers to identify areas and operations that may require additional reduction in airborne cotton dust to meet the permissible exposure limit (PEL).<sup>2</sup> Initial exposure monitoring results also assist employers in determining the need for engineering controls, instituting or modifying work practices, and in selecting appropriate respiratory protection to prevent employees from overexposure to cotton dust.

*Periodic monitoring §1910.1043 (d)(3)(i)* - If the initial monitoring required by paragraph (d)(2) of this section or any subsequent monitoring reveals employee exposure to be at or below the permissible exposure limit, the employer shall repeat the monitoring for those employees at least annually.

*§1910.1043(d)(3)(ii)* - If the initial monitoring required by paragraph (d)(2) of this section or any subsequent monitoring reveals employee exposure to be above the PEL, the employer shall repeat the monitoring for those employees at least every six months.

**Purpose:** Periodic monitoring allows employers to determine if minor changes in processes, materials, or environmental conditions result in increased concentrations of airborne cotton dust. If so, periodic monitoring also enables employers to evaluate the effectiveness of selected control methods. In addition, these measurements remind both the employer and employees of the continuing need to protect against the hazards that could result from employee overexposure to cotton dust.

*§1910.1043(d)(3)(iii)* - Whenever there has been a production, process, or control change which may result in new or additional exposure to cotton dust, or whenever the employer has any other reason to suspect an increase in employee exposure, the employer shall repeat the monitoring and measurements for those employees affected by the change or increase.

**Purpose:** Additional monitoring ensures that the workplace is safe, or alerts to the need for increased control of airborne cotton dust.

#### ***Employee notification (§1910.1043(d)(4))***

*§1910.1043(d)(4)(i)* - The employer must, within 15 working days after the receipt of the results of any monitoring performed under this section, notify each affected employee of these results either individually in writing or by posting the results in an appropriate location that is accessible to employees.

*§1910.1043(d)(4)(ii)* - Whenever the results indicate that the employee's exposure exceeds the applicable permissible exposure limit specified in paragraph (c) of this section, the employer shall include in the written notice a statement that the permissible exposure limit was exceeded and a description of the corrective action taken to reduce exposure below the permissible exposure limit.

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<sup>2</sup>The PEL differs according to the type of cotton dust involved; see paragraph (c)(1) of the Standard.

**Purpose:** Written notices provide assurance that employees are informed about exposure data, and gives employees specific information about the efforts the employer is taking to lower their exposures and furnish them with a safe and healthful workplace in accordance with section 8(c)(3) of the Act.

**B. Methods of compliance (§1910.1043(e))**

*Compliance program §1910.1043(e)(3)(i)* - Where the most recent exposure monitoring data indicates that any employee is exposed to cotton dust levels greater than the permissible exposure limit, the employer shall establish and implement a written program sufficient to reduce exposures to or below the permissible exposure limit solely by means of engineering controls and work practices as required by paragraph (e)(1) of this section.

*§1910.1043(e)(3)(ii)* - The written program shall include at least the following:

§1910.1043(e)(3)(ii)(A) - A description of each operation or process resulting in employee exposure to cotton dust at levels greater than the PEL;

§1910.1043(e)(3)(ii)(B) - Engineering plans and other studies used to determine the controls for each process;

§1910.1043(e)(3)(ii)(C) - A report of the technology considered in meeting the permissible exposure limit;

§1910.1043(e)(3)(ii)(D) - Monitoring data obtained in accordance with paragraph (d) of this section;

§1910.1043(e)(3)(ii)(E) - A detailed schedule for development and implementation of engineering and work practice controls, including exposure levels projected to be achieved by such controls;

§1910.1043(e)(3)(ii)(F) - Work practice program; and

§1910.1043(e)(3)(ii)(G) - Other relevant information.

*§1910.1043(e)(3)(v)* - Written programs shall be submitted, upon request, to the Assistant Secretary and the Director, and shall be available at the worksite for examination and copying by the Assistant Secretary, the Director, and any affected employee or their designated representatives.

*§1910.1043(e)(3)(vi)* - The written program required under paragraph (e)(3) of this section shall be revised and updated when necessary to reflect the current status of the program and current exposure levels.

**Purpose:** This requirement commits the employer to evaluating employee exposure and establishing an organized and complete program for reducing employee exposures to or below the PEL. Revising and updating the written program serves to remind employers to implement and maintain the exposure control methods required by the Standard. Providing the written programs to OSHA compliance officers ensures that employers are in compliance with the Standard, while NIOSH may use the information for research purposes. Employees and their designated representatives review the written programs to determine if the programs validly represent current exposure conditions, and if employers are taking appropriate actions to control cotton-dust exposures.

### **C. Respirator protection (§1910.1043(f))**

*Respirator program (§1910.1043(f)(2)(i))<sup>3</sup>* - 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:** The purpose of these requirements is to ensure that employers establish a standardized procedure for selecting, using, and maintaining respirators for each workplace requiring respirator use. Developing written procedures ensures that employers implement a respirator program that meets the needs of their employees.

### **D. Work practices (§1910.1043(g))**

*§1910.1043(g)* - Each employer shall, regardless of the level of employee exposure, immediately establish and implement a written program of work practices which shall minimize cotton dust exposure. The following shall be included where applicable:

*§1910.1043(g)(1)* - Compressed air "blow down" cleaning shall be prohibited where alternative means are feasible. Where compressed air is used for cleaning, the employees performing the "blow down" or "blow off" shall wear suitable respirators. Employees whose presence is not required to perform "blow down" or "blow off" shall be required to leave the area affected by the "blow down" or "blow off" during this cleaning operation.

*§1910.1043(g)(2)* - Cleaning of clothing or floors with compressed air shall be prohibited.

*§1910.1043(g)(3)* - Floor sweeping shall be performed with a vacuum or with methods designed to minimize dispersal of dust.

*§1910.1043(g)(4)* - In areas where employees are exposed to concentrations of cotton dust greater than the permissible exposure limit, cotton and cotton waste shall be stacked, sorted,

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<sup>3</sup>OSHA accounts for the burden hours and costs resulting from the respiratory-protection requirements under the Information Collection Request (ICR) for its Respiratory Protection Standard (§1910.134), OMB Control No. 1218-0099.

baled, dumped, removed or otherwise handled by mechanical means, except where the employer can show that it is infeasible to do so. Where infeasible, the method used for handling cotton and cotton waste shall be the method which reduces exposure to the lowest level feasible.

**Purpose:** Having the programs in writing, employees have available to them the detailed work-practice procedures necessary to prevent unnecessary or excessive exposure to cotton dust.

#### **E. Medical surveillance (§1910.1043(h))**

***General §1910.1043(h)(1)(i)*** - Each employer covered by the standard shall institute a program of medical surveillance for all employees exposed to cotton dust.

*§1910.1043(h)(1)(ii)* - The employer shall assure that all medical examinations and procedures are performed by or under the supervision of a licensed physician and are provided without cost to the employee.

***Initial examinations §1910.1043(h)(2)*** - The employer shall provide medical surveillance to each employee who is or may be exposed to cotton dust. For new employees, this examination shall be provided prior to initial assignment. The medical surveillance shall include at least the following:

*§1910.1043(h)(2)(i)* - A medical history;

*§1910.1043(h)(2)(ii)* - The standardized questionnaire contained in Appendix B; and

*§1910.1043(h)(2)(iii)* - A pulmonary function measurement, including a determination of forced vital capacity (FVC) and forced expiratory volume in one second (FEV(1)), the FEV(1)/FVC ratio, and the percentage that the measured values of FEV(1) and FVC differ from the predicted values, using the standard tables in Appendix C. These determinations shall be made for each employee before the employee enters the workplace on the first day of the work week, preceded by at least 35 hours of no exposure to cotton dust. The tests shall be repeated during the shift, no less than 4 and no more than 10 hours after the beginning of the work shift; and, in any event, no more than one hour after cessation of exposure. Such exposure shall be typical of the employee's usual workplace exposure. The predicted FEV(1) and FVC for blacks shall be multiplied by 0.85 to adjust for ethnic differences.

#### ***Periodic examinations §1910.1043(h)(3)***

Under these provisions, employers are to implement a medical surveillance program for every employee exposed to cotton dust. Accordingly, employers must provide new employees involved in textile and non-textile operations with an initial medical examination prior to their job assignment if such an assignment exposes the employees to cotton dust. Employers involved in textile operations must provide an annual medical examination for employees exposed to cotton dust above the action level (AL), or a medical examination once every two years for employees exposed to cotton dust at or below the AL and to specific types of washed cotton

(regardless of their exposure level). Employers involved in non-textile operations also are to provide their employees with a medical examination once every two years. Under some conditions (e.g., specific reductions in pulmonary-function parameters, in the opinion of the physician), employees must receive a medical examination every six months.

**Purpose:** Documentation and maintenance of the medical examination results provide a continuous record of employee health. Physicians use these records to determine the extent to which employees, since their last examination, experience health effects related to their cotton-dust exposure. Further, if symptoms of physical damage appear, the physician often needs information about an employee'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 employees 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 (§1910.1043(h)(4))***

§1910.1043(h)(4) - Information provided to the physician. The employer shall provide the following information to the examination physician:

§1910.1043(h)(4)(i) - A copy of this regulation and its Appendices:

§1910.1043(h)(4)(ii) - A description of the affected employee's duties as they relate to the employee's exposure;

§1910.1043(h)(4)(iii) - The employee's exposure level or anticipated exposure level;

§1910.1043(h)(4)(iv) - A description of any personal protective equipment used or to be used; and

§1910.1043(h)(4)(v) - Information from previous medical examinations of the affected employee which is not readily available to the examining physician.

**Purpose:** Making this information available to physicians assists them in evaluating the employee's health and fitness for specific job assignments involving cotton-dust exposure. As noted earlier, if symptoms of physical damage appear, the physician often needs information about an employee's previous medical conditions to make an accurate diagnosis of the new condition, its apparent cause, and the course of treatment required.

***Physician's written opinion (§1910.1043(h)(5))***

§1910.1043(h)(5)(i) - The employer shall obtain and furnish the employee with a copy of a written opinion from the examining physician containing the following:

§1910.1043(h)(5)(i)(A) - The results of the medical examination and tests including the FEV(1), FVC, AND FEV(1)/FVC ratio;

§1910.1043(h)(5)(i)(B) - The physician's opinion as to whether the employee has any detected medical conditions which would place the employee at increased risk of material impairment of the employee's health from exposure to cotton dust;

§1910.1043(h)(5)(i)(C) - The physician's recommended limitations upon the employee's exposure to cotton dust or upon the employee's use of respirators including a determination of whether an employee can wear a negative pressure respirator, and where the employee cannot, a determination of the employee's ability to wear a powered air purifying respirator; and,

§1910.1043(h)(5)(i)(D) - A statement that the employee has been informed by the physician of the results of the medical examination and any medical conditions which require further examination or treatment.

*§1910.1043(h)(5)(ii)* - The written opinion obtained by the employer shall not reveal specific findings or diagnoses unrelated to occupational exposure.

**Purpose:** The purpose of requiring the employer to obtain a written opinion from the examining physician is to provide the employer with medical information to aid in determining the initial placement of an employee, and to assess the employee's ability to use protective clothing and equipment. The physician's opinion also provides information to the employer about whether or not the employee has a condition indicating overexposure to cotton dust. The requirement that the physician's opinion be in writing ensures that the information is properly documented for later reference. Providing employees 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.

#### **F. Employee education and training (§1910.1043(i))**

*Training program §1910.1043(i)(1)(i)* - The employer shall provide a training program for all employees exposed to cotton dust and shall assure that each employee is informed of the following:

§1910.1043(i)(1)(i)(A) - The acute and long term health hazards associated with exposure to cotton dust;

§1910.1043(i)(1)(i)(B) - The names and descriptions of jobs and processes which could result in exposure to cotton dust at or above the PEL.



§1910.1043(i)(1)(i)(C) - The measures, including work practices required by paragraph (g) of this section, necessary to protect the employee from exposures in excess of the permissible exposure limit;

§1910.1043(i)(1)(i)(D) - The purpose, proper use and limitations of respirators required by paragraph (f) of this section;

§1910.1043(i)(1)(i)(E) - The purpose for and a description of the medical surveillance program required by paragraph (h) of this section and other information which will aid exposed employees in understanding the hazards of cotton dust exposure; and

§1910.1043(i)(1)(i)(F) - The contents of this standard and its appendices.

*§1910.1043(i)(1)(ii)* - The training program shall be provided prior to initial assignment and shall be repeated annually for each employee exposed to cotton dust, when job assignments or work processes change and when employee performance indicates a need for retraining.

***Access to training materials §1910.1043(i)(2)***

*§1910.1043(i)(2)(i)* - Each employer shall post a copy of this section with its appendices in a public location at the workplace, and shall, upon request, make copies available to employees.

*§1910.1043(i)(2)(ii)* - The employer shall provide all materials relating to the employee training and information program to the Assistant Secretary and the Director upon request.

**Purpose:** Training is essential to inform employees of the health hazards of cotton-dust exposure, and to provide them with the understanding required to minimize these health hazards. In addition, training provides information to employees that enable them to recognize how and where cotton-dust exposure occurs, and what steps to take, including work practices, to limit such exposure. Another benefit of training is that it serves to explain and reinforce the information presented to employees on warning signs and labels. This warning information will be successful and relevant only if employees understand the information, and are aware of the actions they must take to avoid or minimize cotton-dust exposure. The requirement to provide the training materials to OSHA compliance officers ensures that the training materials are correct and meet the requirements of this provision; NIOSH may use the training material for research purposes.

### **G. Signs (§1910.1043(j))**

The employer shall post the following warning sign in each work area where the permissible exposure limit for cotton dust is exceeded:

WARNING  
COTTON DUST WORK AREA  
MAY CAUSE ACUTE OR DELAYED  
LUNG INJURY  
(BYSSINOSIS)  
RESPIRATORS  
REQUIRED IN THIS AREA

**Purpose:** These signs serve to warn employees that they are in or near a hazardous area. Warning signs also supplement the training employees receive under the Standard.

### **H. Recordkeeping (§1910.1043(k))**

#### ***Exposure measurements §1910.1043(k)(1)***

*§1910.1043(k)(1)(i)* - The employer shall establish and maintain an accurate record of all measurements required by paragraph (d) of this section.

*§1910.1043(k)(1)(ii)* - The record shall include:

§1910.1043(k)(1)(ii)(A)<sup>4</sup> - A log containing the items listed in paragraph IV (a) of Appendix A, and the dates, number, duration, and results of each of the samples taken, including a description of the procedure used to determine representative employee exposure;

§1910.1043(k)(1)(ii)(B) - The type of protective devices worn, if any, and length of time worn; and

§1910.1043(k)(1)(ii)(C) - The names, social security numbers, job classifications, and exposure levels of employees whose exposure the measurement is intended to represent.

*§1910.1043(k)(1)(iii)* - The employer shall maintain this record for at least 20 years.

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<sup>4</sup>An employer may instead retain a copy of the Standard and its appendices, and make this material available to the employee if the employer references the Standard and its appendices in the record maintained for each employee.

***Medical surveillance §1910.1043(k)(2)***

§1910.1043(k)(2)(i) - The employer shall establish and maintain an accurate medical record for each employee subject to medical surveillance required by paragraph (h) of this section.

§1910.1043(k)(2)(ii) - The record shall include:

§1910.1043(k)(2)(ii)(A) - The name and social security number and description of the duties of the employee;

§1910.1043(k)(2)(ii)(B) - A copy of the medical examination results including the medical history, questionnaire response, results of all tests, and the physician's recommendation;

§1910.1043(k)(2)(ii)(C) - A copy of the physician's written opinion;

§1910.1043(k)(2)(ii)(D) - Any employee medical complaints related to exposure to cotton dust;

§1910.1043(k)(2)(ii)(E) - A copy of this standard and its appendices, except that the employer may keep one copy of the standard and the appendices for all employees, provided that he references the standard and appendices in the medical surveillance record of each employee; and

§1910.1043(k)(2)(ii)(F) - A copy of the information provided to the physician as required by paragraph (h)(4) of this section.

§1910.1043(k)(2)(iii) - The employer shall maintain this record for at least 20 years.

**Purpose:** This requirement provides both employers and employees with access to useful information. The exposure monitoring and medical surveillance records required by the Standard assist employees and their physicians in determining the need for treatment or other interventions as a result of the employees' exposure to cotton dust. The information also alerts employers when employee overexposure to cotton dust occurs, thereby enabling employers to take steps required to reduce cotton-dust exposures. Maintaining the records for a 20 year period is necessary because of the long latency associated with the development of pulmonary diseases caused by exposure to cotton dust.

***Availability (§1910.1043(k)(3))***

§1910.1043(k)(3)(i) - The employer shall make all records required to be maintained by paragraph (k) of this section available to the Assistant Secretary and the Director for examination and copying.

§1910.1043(k)(3)(ii) - Employee exposure measurement records and employee medical records required by this paragraph shall be provided upon request to employees, designated representatives, and the Assistant Secretary in accordance with 29 CFR 1910.1020(a) through (e) and (g) through (i).

**Purpose:** The OSHA compliance officer uses these records to assess employer compliance with the major exposure monitoring and medical surveillance requirements of the Standard, while NIOSH may compile these records for research purposes. Employees and their designated representatives use exposure monitoring and medical surveillance records to assess an employee's medical status over the course of employment, to evaluate the effectiveness of the employer's exposure reduction program, and for other reasons.

***Transfer of records (§1910.1043(k)(4))***

§1910.1043(k)(4)(i) - Whenever the employer ceases to do business, the successor employer shall receive and retain all records required to be maintained by paragraph (k) of this section.

§1910.1043(k)(4)(ii) - Whenever the employer ceases to do business, and there is no successor employer to receive and retain the records for the prescribed period, these records shall be transmitted to the Director.

§1910.1043(k)(4)(iii) - At the expiration of the retention period for the records required to be maintained by this section, the employer shall notify the Director at least 3 months prior to the disposal of such records and shall transmit those records to the Director if the Director requests them within that period.

§1910.1043(k)(4)(iv) - The employer shall also comply with any additional requirements involving transfer of records set forth in 29 CFR 1910.1020(h).

**Purpose:** NIOSH may use these records for research purposes (e.g., assessing the medical effects of long-term exposure to cotton dust). In addition, with NIOSH serving as a repository for exposure monitoring and medical surveillance records, employees have access to 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, including electronic recording, when establishing or maintaining records. OSHA wrote the paperwork requirements of the Standard in performance-oriented language, i.e., in terms of what data to collect, not how to collect the data.

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

The requirements to collect and maintain information are specific to each employer and employee involved, and no other source or agency duplicates these requirements or can make the required information available to OSHA (i.e., the required information is available only from employers).

5. **If the collection of information impacts small businesses or other small entities (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 Agency believes that the information collection frequencies required by the Standard are the minimum frequencies necessary to effectively monitor the exposure and health status of employees exposed to cotton dust, and thereby fulfill its mandate “to assure so far as possible every working man and woman in the Nation safe and healthful working conditions and to preserve our human resources” as specified by the OSH Act at 29 U.S.C. 651. Accordingly, if employers do not perform the required information collections, or delay in providing this information, employees will have an increased probability of developing serious or fatal pulmonary disease because of their cotton-dust exposures.

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

- **Requiring respondents to report information to the agency more often than quarterly;**
- **Requiring respondents to prepare a written response to a collection of information in fewer than 30 days after receipt of it;**
- **Requiring respondents to submit more than an original and two copies of any document;**
- **Requiring respondents to retain records, other than health, medical, government contract, grant-in-aid, or tax records for more than three years;**
- **In connection with a statistical survey, that is not designed to produce valid and reliable results that can be generalized to the universe of study;**
- **Requiring the use of a statistical data classification that has not been reviewed and approved by OMB;**

**That includes a pledge of confidentiality that is not supported by authority established in statute or regulation, that is not supported by disclosure and data security policies that are consistent with the**

**pledge, or which unnecessarily impedes sharing of data with other agencies for compatible confidential use; or**

- **Requiring respondents to submit proprietary trade secret, or other confidential information unless the agency can demonstrate that it has instituted procedures to protect the information's confidentiality to the extent permitted by law.**

Paragraph (d)(4) requires that the employer notify each employee in writing of exposure monitoring results within 15 working days after receiving these results. The 15 working day period is a reasonable time for notification in general industry with its more stable workforce and is the time frame OSHA adopted in most of its health standards for general industry.

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

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

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

As required by the Paperwork Reduction Act of 1995 (44 U.S.C. 3506(c)(2)(A)), OSHA published a **Federal Register** on July 31, 2008 (73 FR 44774, Docket No. OSHA-2008-0015) soliciting comments from the public and other interested parties on the information collection requirements contained in the Standard on Cotton Dust (29 CFR 1910.1043). 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 OMB of a previous approval of the information collection requirements found in the above Standard. The Agency has not received any comments in response to this notice.

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

The Agency will provide no payments or gifts to the respondents.

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

To ensure that the personal information contained in medical records remains confidential, OSHA developed §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 reason why the agency considers the questions necessary, the specific uses to be made of the information, the explanation to be given to persons from whom the information is requested, and any steps to be taken to obtain their consent.**

The paperwork requirements specified by the Standard do not involve 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 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.**

## **Burden Hour and Cost Determinations**

To estimate the number of establishments in textile operations that process cotton, the Agency updated the Standard Industrial Classification (SIC) industry codes discussed in the previous ICR to reflect the North American Industrial Classification System (NAICS) codes using the U.S. Census Bureau's *Bridge between SIC and NAICS*.<sup>5</sup> In many cases, the SIC industry sectors described in the previous ICR comprise only a portion of a given NAICS industry as a whole; the *Bridge* describes each NAICS industry and the SICs or partial SICs of which they are comprised. To determine the number of establishments in each industry sector, it was necessary to first determine which percentage of establishments in the overall NAICS industry was comprised by a given SIC industry sector. This ratio was then applied to the current industry establishments and employment statistics as listed in the 2005 County Business Patterns Survey.<sup>6</sup>

In effort to update assumptions regarding the number of establishments covered by the Standard and employees exposed to cotton dust, the Agency contacted the Agricultural Research Service and the National Cotton Council. Since neither organization was able to provide updated estimates, and given that the Agency did not receive comments on estimates in the Cotton Dust Standard during the Standards Improvement Project – Phase II (SIPs) rulemaking (OSHA published the final rule on January 5, 2005 (70 FR 1112)), the Agency has retained assumptions

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<sup>5</sup>*Bridge Between SIC and NAICS* (U.S. Census Bureau, 1997 Economic Census, Comparative Statistics. <<http://www.census.gov/epcd/ec97brdg/>>).

<sup>6</sup>U.S. Census Bureau, 2005 County Business Patterns Survey. <<http://censtats.census.gov/cbpnaic/cbpnaic.shtml>>

from the previous ICR regarding the percentage of establishments processing cotton and also the percentage of employees exposed to cotton dust.<sup>7</sup> Tables 1 and 2 below present data for establishments that have textile operations that process cotton, and information for exposed employees involved in operations that process cotton, respectively.

Non-textile operations principally involve the cottonseed processing and cotton-waste recycling industries; only the paperwork requirements specified for medical surveillance under paragraph (h) of the Standard apply to these industries. In consultation with the National Cottonseed Products Association, the Agency found that 13 establishments were performing cottonseed processing with a production workforce of roughly 250 employees, and an estimated annual turnover rate of 35%. In an effort to update establishment and employment estimates for the cotton-waste recycling industry, the Agency contacted the Secondary Materials and Recycled Textiles Association (SMART). Following consultation with SMART, the Agency assumes that the cotton-waste recycling industry contains an estimated production workforce of 1,082<sup>8</sup> employees and an annual employee turnover rate of 31.4%.

The Agency adopted the mean wage rates from “*Employer Costs for Employee Compensation, September 2007*,” U.S. Department of Labor, Bureau of Labor Statistics <http://stats.bls.gov/home.htm>. Total compensation for these occupational categories includes an adjustment of 29.4 percent (*Employer Costs for Employee Compensation, September 2007, pp.4*) for fringe benefits; this figure represents the average level of fringe benefits in the private sector. The costs of labor used in this analysis are, therefore, estimates of total hourly compensation. These hourly wages are:

- Supervisors: \$48.17
- Production workers, excluding supervisors: \$22.25
- Secretarial workers: \$23.14
- Industrial hygienist technicians: \$26.12

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<sup>7</sup>Source: Centaur Associates, Inc. (CAI), *Technical and Economic Analysis of Regulating Occupational Exposure to Cotton Dust*, Vol. I, Exhibit 2-2, January 1983. CAI prepared this report for the 1983 Regulatory Impact Analysis performed during a revision to the Standard.

<sup>8</sup>Source: U.S. Census Bureau, 2005 County Business Patterns Survey: NAICS 314999 – All Other Miscellaneous Textile Product Mills. The previous ICR update estimated that there were 1,140 production employees in the cotton-waste recycling industry. From 2003 to 2005, employment in NAICS 314999 declined by roughly 5.1%; it was assumed that employment in the cotton-waste recycling industry also declined by 5.1%.



**Table 1: Estimated Number of Establishments in Textile Operations That Process Cotton (Including Knitting Mills)**

NAICS	Industry Sector	No. of Establishments	% of Establishments Processing Cotton [a]	No. of Establishments Processing Cotton
313210	Broadwoven Cotton Weaving	254 [b]	70	178
313210	Broadwoven Synthetic Weaving	289 [c]	21	61
313221	Narrow Fabric Weaving	219 [d]	13	28
315111	Knitting Mills	69 [e]	—	4 [i]
315119		232 [e]		
315191		251 [e]		
315192		24 [e]		
313241		143 [e]		
313249		162 [e]		
313312		221 [e]		
313111	Yarn Spinning	286 [f]	18	51
313112	Winding and Throwing	130 [g]	5	7
313312		13 [g]		
313113	Thread Mills	72 [h]	61	55
313312		18 [h]		
<b>TOTAL</b>				<b>384</b>

[a] Source: The CAI Report.

[b] Those establishments in SIC 2211 comprised roughly 44% of total establishments in NAICS 313210 in the 1997 Census. In 2005, there were an estimated 578 establishments in NAICS 313210.

[c] Those establishments in SIC 2221 comprised roughly 50% of total establishments in NAICS 313210 in the 1997 Census. In 2005, there were an estimated 578 establishments in NAICS 313210.

[d] Those establishments in SIC 2241 comprised roughly 99% of total establishments in NAICS 313221 in the 1997 Census. In 2005, there were an estimated 221 establishments in NAICS 313210.

[e] Those establishments in SIC 2250 and 2252 comprised 100% of establishments in NAICS 315111, establishments in SIC 2252 comprised 100% of establishments in NAICS 315119, establishments in SIC 2253 and 2259 comprised 100% of establishments in NAICS 315191, establishments in SIC 2254 and 2259 comprised 100% of establishments in NAICS 315192, establishments in SIC 2257 comprised 100% of establishments in NAICS 313241 (143), establishments in SIC 2258 and 2259 comprised 100% of establishments in NAICS 313249, and establishments in SIC 2258 and 2259 comprised 50% of establishments in NAICS 313312.

[f] Those establishments in SIC 2281 comprised roughly 95% of total establishments in NAICS 313111 in

the 1997 Census. In 2005, there were an estimated 301 establishments in NAICS 313111.

<sup>[g]</sup>Those establishments in SIC 2282 comprised 100% of establishments in NAICS 313112 and roughly 3% of establishments in NAICS 313312 in the 1997 Census. In 2005, there were an estimated 130 establishments in NAICS 313112 and 441 establishments in NAICS 313312.

<sup>[h]</sup>Those establishments in SIC 2284 comprised roughly 98% of total establishments in NAICS 313113 and roughly 4% of total establishments in NAICS 313312 in the 1997 Census. In 2005, there were an estimated 74 establishments in NAICS 313113 and 441 establishments in NAICS 313312.

<sup>[i]</sup>The previous ICR update estimated that there were 1,972 total establishments and 7 establishments processing cotton. The Agency's updated figures estimate 1,102 total establishments, or a 44.1% reduction in total establishments. This 44.1% reduction was then applied to the original number of establishments processing cotton (7).

**Table 2: Estimated Number of Exposed Employees in Textile Operations That Process Cotton (Including Knitting Mills)**

NAICS	Industry Sector	No. of Employees <sup>[a]</sup>	No. of Employees in Establishments Processing Cotton	% of Employees Exposed to Cotton Dust <sup>[b]</sup>	No. of Employees Exposed to Cotton Dust
313210	Broadwoven Cotton Weaving	24,451	17,115	77	13,179
313210	Broadwoven Synthetic Weaving	27,786	5,835	77	4,493
313221	Narrow Fabric Weaving	9,840	1,279	77	985
315111	Knitting Mills	5,856	—	—	353
315119		17,858			
315191		8,037			
315192		1,432			
313241		10,923			
313249		7,687			
313312		8,726			
313111	Yarn Spinning	31,995	5,759	77	4,434
313112	Winding and Throwing	18,073	930	77	716
313312		524			
313113	Thread Mills	2,064	1,685	77	1,297
313312		699			
<b>TOTAL</b>					<b>25,457</b>

<sup>[a]</sup>Source: U.S. Census Bureau, 2005 County Business Patterns Survey. Employment totals were derived using the ratios used in Table 1 to determine the number of establishments in each industry sector. Thus, if a given industry sector in Table 1 comprises 50% of the total number of establishments in a NAICS industry, it was assumed that the industry sector also comprised 50% of the employees.

<sup>[b]</sup>Source: The CAI Report.

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.

### **Exposure monitoring (§1910.1043(d))**

#### Alternative cotton-dust sampler (§1910.1043(d)(1))

During the previous clearance period, no employers requested OSHA's opinion regarding an alternative cotton-dust sampler. Therefore, the Agency believes that no employer will make such a request during the clearance period covered by this ICR, and is not taking burden hours and costs for this paperwork requirement.

#### Initial, periodic, and additional monitoring (§1910.1043(d)(2) and (d)(3))

OSHA assumes that employers monitor each employee exposed to cotton dust during textile operations an average of once a year; this average includes initial, periodic, and additional exposure monitoring. From Table 2, the Agency estimates 25,457 employees are exposed to cotton dust. As described in the Regulatory Impact Analysis (RIA) for the final Standard (December 17, 1985, published at 50 FR 51120), employers use six vertical elutriators (or equivalent samplers) to assess representative cotton-dust exposures for a group of 15 employees, for a total of 1,697 samples each year (i.e., 25,457 exposed employees ÷ 15 employees per sample × 1 sample per year). In addition, the Agency estimates that an in-house industrial-hygiene technician takes two hours (2.00 hours) to assemble, check, and disassemble the samplers used for each group of employees, resulting in total annual burden-hour and cost estimates of:

**Burden hours:** 1,697 samples × 2 hours = 3,394 hours

**Cost:** 3,394 hours × \$26.12 = \$88,651

#### Employee notification (§1910.1043(d)(4))

The standard requires employers to notify employees of their exposure-monitoring results. Notification must occur within 15 days after the employer receives the results either by providing each employee with a written copy of their results or by posting the results in an appropriate location that is accessible to the employees. OSHA believes that such notification requires a secretary five minutes (.08 hour) to prepare and post the results for the 384 employers (Table 1). Accordingly, the total annual burden-hour and cost estimates for this paperwork requirement are:

**Burden hours:** 384 employers × .08 hour = 31 hours

**Cost:** 31 hours × \$23.14 = \$717

## **Methods of compliance (§1910.1043(e))**

### Compliance program (§1910.1043(e)(3))

OSHA assumes that no new establishments will process cotton during the clearance period covered by this ICR. Therefore, only existing establishments with poor maintenance or new processes that result in employee exposures above the PEL will update their written compliance programs. Accordingly, the Agency estimates, consistent with the previous ICR, that 10 establishments must revise their written compliance programs each year, and that a supervisor requires about one hour (1.00 hour) to update such a program. Thus, the total burden-hour and cost estimates for this paperwork requirement each year are:

**Burden hours:** 10 facilities × 1.00 hour = 10 hours

**Cost:** 10 hours × \$48.17 = \$482

### **Respirator program (§1910.1043(f)(2)(i))**

Employers must implement a respiratory protection program in accordance with 29 CFR 1910.134 (b) through (d) (except (d)(1)(iii)), and (f) through (m). OSHA accounts for the burden hours and costs resulting from the respiratory-protection requirements under the Information Collection Request (ICR) for its Respiratory Protection Standard (§1910.134), OMB Control No. 1218-0099.

**Purpose:** The purpose of these requirements is to ensure that employers establish a standardized procedure for selecting, using, and maintaining respirators for each workplace requiring respirator use. Developing written procedures ensures that employers implement a respirator program that meets the needs of their employees.

### **Work practices (§1910.1043(g))**

As noted in the previous determination for compliance programs above, OSHA assumes that this ICR will cover only existing cotton-processing establishments. Therefore, no employer will have to develop and implement a written program of work practices to minimize employee cotton-dust exposure during the clearance period covered by the ICR. Accordingly, the Agency is not taking any burden hours or cost for this paperwork requirement.

## Medical surveillance (§1910.1043(h))

### Initial examinations (§1910.1043(h)(2))

With an annual employee turnover rate of 31.4%<sup>9</sup>, employers hire 7,993 new employees for textile operations each year (i.e., 25,457 existing employees × 31.4% turnover rate). The two non-textile operations, cotton-seed processing and cotton-waste recycling, have yearly employee turnover rates of 35%<sup>10</sup> and 31.4%<sup>11</sup>, respectively; accordingly, the cottonseed processing industry has 88 new employees annually (i.e., 250 employees × 35% turnover rate), while 340 new employees enter the cotton-waste-recycling industry annually (i.e., 1,082 existing employees × 31.4% turnover rate). Therefore, the total number of new employees hired each year for textile and non-textile operations is 8,421; each of these new employees must receive an initial medical examination. Assuming that an employee takes one and one-half hours (1.50 hours) of paid time to complete an initial medical examination at an offsite medical facility,<sup>12</sup> the estimated total annual burden hours and cost of this requirement are:

**Burden hours:** 8,421 examinations × 1.50 hours = 12,632 hours

**Cost:** 12,632 hours × \$22.25 = \$281,062

### Periodic examinations (§1910.1043(h)(3))

Consistent with the previous ICR, OSHA assumes that 54% (13,747) of the 25,457 employees exposed to cotton dust during textile operations have exposures above the AL and, therefore, must receive at least an annual periodic medical examination.<sup>13</sup> In addition, only employees who remain with an employer for at least a year require an annual periodic medical examination (i.e., new employees, who constitute 31.4% (4,317) of the employees exposed above the AL during textile operations, are exempt from these examinations for one year from the date of hire).

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<sup>9</sup>Source: U.S. Bureau of Labor Statistics, Job Openings and Labor Turnover Survey (JOLTS) 2004-2007. This value represents the average total separations rate for manufacturing industries in the United States from 2004 to 2007.

<sup>10</sup>This value was provided as an estimate by the National Cottonseed Products Association.

<sup>11</sup>In consultation with the Secondary Materials and Recycled Textiles Association (SMART), the Agency was unable to identify a unique employee turnover rate for this industry. As a result, the Agency assumes that employee turnover in the cotton-waste recycling industry is the same as manufacturing industries in the United States as a whole.

<sup>12</sup>This time includes 30 minutes to travel to and from the offsite facility, and an additional hour to administer an examination. Many employers use offsite medical facilities because employees can receive their initial medical examinations individually (i.e., in a piecemeal fashion), thereby avoiding the wasted time and inefficiencies associated with establishing a permanent onsite medical facility or arranging for a mobile medical facility (e.g., a van).

<sup>13</sup>The Agency is using this percentage (54%) because it has no recent information describing cotton-dust exposures among employees involved in textile operations.

Therefore, a total of 9,430 of these employees must receive an annual periodic medical examination (i.e., 13,747 employees exposed above the AL – 4,317 new employees exposed above the AL).

The remaining 46% (11,710) of exposed employees involved in textile operations have cotton-dust exposures at or below the AL; employers must administer a periodic medical examination to these employees at least once every two years. With an annual turnover rate of 31.4%, OSHA estimates that 5,511<sup>14</sup> of these employees are available two years after the hiring date for the required medical examination; assuming that employers administer these examinations evenly over any two-year period, then 2,756 of these employees obtain the examination each year.

OSHA assumes that exposed employees involved in non-textile operations have no cotton-dust exposures above the AL; therefore, these employees must receive a periodic medical examination at least once every two years. With an annual turnover rate of 35%, the Agency estimates that 106 exposed employees engaged in cottonseed processing operations are available two years after the hiring date for the required medical examination. The 1,082 employees in the cotton-waste-recycling industry have a turnover rate of 31.4%, indicating that 509 of these employees are available two years after the hiring date for periodic medical examinations. If employers distribute these examinations equally over any two-year period, then 308 (i.e.,  $(106 + 509) \div 2$ ) of these employees receive the examination each year.

The Agency assumes that an employee takes one hour (1.00 hour) of paid time to complete a periodic medical examination at an onsite medical facility.<sup>15</sup> With a total of 12,494 periodic medical examinations to administer each year,<sup>16</sup> the Agency estimates the annual burden hours and cost of this requirement to be:

**Burden hours:** 12,494 examinations  $\times$  1.00 hour = 12,494 hours

**Cost:** 12,494 hours  $\times$  \$22.25 = \$277,992

#### Information provided to the physician (§1910.1043(h)(4))

The Agency believes that, for each medical examination administered to an employee, it takes a secretary five minutes (.08 hour) to compile the required information and provide it to the physician. With a total of 20,915 medical examinations to administer each year (i.e., 8,421 initial examinations and 12,494 periodic examinations), the estimated total annual burden hours and

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<sup>14</sup>This number (5,511) was calculated using the following equation: 11,710 exposed employees at or below the AL  $\times$  68.6% = 8,033 (first year), 8,033  $\times$  68.6% (second year) = 5,511 exposed employees.

<sup>15</sup>These employees would go to a mobile, onsite medical facility (e.g., a van) because they could receive the medical examinations in small groups; under these conditions, employers save the time (30 minutes) and associated cost required for employees to travel to an offsite medical facility, while making optimum use of the onsite facility.

<sup>16</sup>This total consists of 9,430 examinations for textile employees exposed above the AL; 2,756 textile employees exposed at or below the AL; and 308 non-textile employees exposed at or below the AL.

cost of this provision are:

**Burden hours:** 20,915 examinations × .08 hour = 1,673 hours

**Cost:** 1,673 hours × \$23.14 = \$38,713

Physician's written opinion (§1910.1043(h)(5))

OSHA assumes a secretary spends five minutes (.08 hour) delivering a copy of the physician's written opinion to each employee who receives a medical examination, as well as maintaining a record of the opinion. For the 20,915 medical examinations that employees receive each year, the estimated total annual burden hours and cost of this requirement are:

**Burden hours:** 20,915 opinions × .08 hour = 1,673 hours

**Cost:** 1,673 hours × \$23.14 = \$38,713

**Employee education and training (§1910.1043(i))**

OSHA believes the 25,457 exposed employees involved in textile operations receive either initial or refresher training each year.<sup>17</sup> In addition, the Agency assumes that, for each training session consisting of 20 employees, a supervisor spends 15 minutes preparing for the training session and one hour providing the required training, for a total of one and one-quarter hours (1.25 hours). With a total of 1,273 training sessions (i.e., 25,457 employees ÷ 20 employees per session), OSHA estimates the total annual burden hours and cost of this training requirement to be:

**Burden hours:** 1,273 sessions × 1.25 hours = 1,591 hours

**Cost:** 1,591 hours × \$48.17 = \$76,638

**Signs (§1910.1043(j))**

The provisions containing the paperwork requirements associated with signs specify the design, format, and specific language for these materials. Therefore, OSHA is taking no burden for these provisions because it is providing the information needed by employers to meet these requirements. (See "Controlling Paperwork Burden on the Public," 5 CFR 1320.3(c)(2)).

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<sup>17</sup> Refresher training is that training employers must provide at least once a year, if a change occurs in an employee's job assignment or work process, or if an employee's performance indicates a need for retraining.



## Recordkeeping (§1910.1043(k))<sup>18</sup>

### Exposure measurements (§1910.1043(k)(1))

The Agency assumes that a secretary takes about five minutes (.08 hour) a year to establish and maintain an employee's exposure-monitoring record. Assuming that 25,457 employees in the textile industry require exposure monitoring (see the determinations for "Initial, Periodic, and Additional Monitoring (§ 1910.1043(d)(2) and (d)(3))" above), the total annual burden-hours and cost estimates for this requirement are:

**Burden hours:**  $25,457 \text{ employees} \times .08 \text{ hour} = 2,037 \text{ hours}$

**Cost:**  $2,037 \text{ hours} \times \$23.14 = \$47,136$

### Availability (§1910.1043(k)(3))

OSHA estimates that its compliance officers request records maintained under the Standard during five inspections annually,<sup>19</sup> and that a supervisor spends five minutes (.08 hour) informing the compliance officer of the location of these records.<sup>20</sup> In addition, the Agency assumes that 10% (2,546) of the covered employees in the textile and non-textile industries (i.e.,  $25,457 \text{ covered employees} \times 10\% = 2,546 \text{ employees}$ ) or their designated representatives request access to these records each year. OSHA estimates that a secretary requires five minutes (.08 hour) to make the requested record available to each employee. Therefore, the total yearly burden hours and cost associated with making the required records available to OSHA compliance officers and employees is:

**Burden hours:**  $(5 \text{ inspection-related requests} \times .08 \text{ hour}) + (2,546 \text{ employee-related requests} \times .08 \text{ hour}) = 204 \text{ hours}$

**Cost:**  $(1 \text{ hour} \times \$48.17 \text{ (supervisor)}) + (204 \text{ hours} \times \$23.14 \text{ (secretary)}) = \$4,740$

### Transfer of records (§1910.1043 (k)(4))

Based on previous ICRs, NIOSH does not receive exposure monitoring or medical surveillance records from employers in the industries covered by the Standard. However, to account for possible future transfers, OSHA assumes that these employers transfer three sets of records to

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<sup>18</sup>The Agency is accounting for the medical-surveillance recordkeeping requirements under the determinations for "Physician's written opinion (§1910.1043(h)(5))" above.

<sup>19</sup>The Agency estimated the number of inspections by determining the inspection rate (1.4%) for all establishments under the jurisdiction of the OSH Act (including both Federal OSHA and approved state-plan agencies), and then multiplied the total number of establishments covered by the Standard (386) by this percentage (i.e.,  $384 \text{ establishments} \times 1.4\% = 5 \text{ inspections}$ .)

<sup>20</sup>The Agency assumes, based on previous history, that no NIOSH representative will request these records.

NIOSH, and that a secretary spends one hour (1.00 hour) preparing and sending each set of records for the employer. Therefore, the Agency estimates the total annual burden hours and cost of this requirement to be:

**Burden hours:** 3 sets of records × 1.00 hour = 3 hours

**Cost:** 3 hours × \$23.14 per hour = \$69

13. **Provide an estimate of the total annual cost burden to respondents or recordkeepers resulting from the collection of information. (Do not include the cost of any hour burden shown in Items 12 and 14).**
- **The cost estimate should be split into two components: (a) a total capital and start-up cost component (annualized over its expected useful life); and (b) a total operation and maintenance and purchase of service component. The estimates should take into account costs associated with generating, maintaining, and disclosing or providing the information. Include descriptions of methods used to estimate major cost factors including system and technology acquisition, expected useful life of capital equipment, the discount rate(s), and the time period over which costs will be incurred. Capital and start-up costs include, among other items, preparations for collecting information such as purchasing computers and software; monitoring, sampling, drilling and testing equipment; and record storage facilities.**
  - **If cost estimates are expected to vary widely, agencies should present ranges of cost burdens and explain the reasons for the variance. The cost of purchasing or contracting out information collection services should be a part of this cost burden estimate. In developing cost burden estimates, agencies may consult with a sample of respondent (fewer than 10), utilize the 60-day pre-OMB submission public comment process and use existing economic or regulatory impact analysis associated with the rulemaking containing the information collection, as appropriate.**
  - **Generally, estimates should not include purchases of equipment or services, or portions thereof, made: (1) prior to October 1, 1995, (2) to achieve regulatory compliance with requirements not associated with the information collection, (3) for reasons other than to provide information or keep records for the government, or (4) as part of customary and usual business or private practices.**

## **BURDEN-HOUR AND COST DETERMINATIONS**

To estimate the number of establishments in textile operations that process cotton, the Agency updated the Standard Industrial Classification (SIC) industry codes discussed in the previous ICR to reflect the North American Industrial Classification System (NAICS) codes using the U.S. Census Bureau's *Bridge between SIC and NAICS*.<sup>21</sup> In many cases, the SIC industry sectors described in the previous ICR comprise only a portion of a given NAICS industry as a whole; the *Bridge* describes each NAICS industry and the SICs or partial SICs of which they are comprised. To determine the number of establishments in each industry sector, it was necessary to first determine which percentage of establishments in the overall NAICS industry was comprised by a

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given SIC industry sector. This ratio was then applied to the current industry establishments and employment statistics as listed in the 2005 County Business Patterns Survey.<sup>22</sup>

In effort to update assumptions regarding the number of establishments covered by the Standard and employees exposed to cotton dust, the Agency contacted the Agricultural Research Service and the National Cotton Council. Since neither organization was able to provide updated estimates, and given that the Agency did not receive comments on estimates in the Cotton Dust Standard during the Standards Improvement Project – Phase II (SIPs) rulemaking (OSHA published the final rule on January 5, 2005 (70 FR 1112)), OSHA has retained assumptions from the previous ICR regarding the percentage of establishments processing cotton and also the percentage of employees exposed to cotton dust.<sup>23</sup> Tables 1 and 2 below present data for establishments that have textile operations that process cotton, and information for exposed employees involved in operations that process cotton, respectively.

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The Agency adopted the mean wage rates from “*Employer Costs for Employee Compensation, September 2007*,” U.S. Department of Labor, Bureau of Labor Statistics <http://stats.bls.gov/home.htm>. Total compensation for these occupational categories includes an adjustment of 29.4 percent (*Employer Costs for Employee Compensation, September 2007, pp.4*) for fringe benefits; this figure represents the average level of fringe benefits in the private sector. The costs of labor used in this analysis are, therefore, estimates of total hourly compensation. These hourly wages are:

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<sup>22</sup>U.S. Census Bureau, 2005 County Business Patterns Survey.  
<<http://censtats.census.gov/cbpnaic/cbpnaic.shtml>>

<sup>23</sup>Source: Centaur Associates, Inc. (CAI), *Technical and Economic Analysis of Regulating Occupational Exposure to Cotton Dust*, Vol. I, Exhibit 2-2, January 1983. CAI prepared this report for the 1983 Regulatory Impact Analysis performed during a revision to the Standard.

<sup>24</sup>Source: U.S. Census Bureau, 2005 County Business Patterns Survey: NAICS 314999 – All Other Miscellaneous Textile Product Mills. The previous ICR update estimated that there were 1,140 production employees in the cotton-waste recycling industry. From 2003 to 2005, employment in NAICS 314999 declined by roughly 5.1%; it was assumed that employment in the cotton-waste recycling industry also declined by 5.1%.

- Production workers, excluding supervisors: \$22.25
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<b>TOTAL</b>				<b>384</b>

<sup>[a]</sup>Source: The CAI Report.

<sup>[b]</sup>Those establishments in SIC 2211 comprised roughly 44% of total establishments in NAICS 313210 in the 1997 Census. In 2005, there were an estimated 578 establishments in NAICS 313210.

<sup>[c]</sup>Those establishments in SIC 2221 comprised roughly 50% of total establishments in NAICS 313210 in the 1997 Census. In 2005, there were an estimated 578 establishments in NAICS 313210.

<sup>[d]</sup>Those establishments in SIC 2241 comprised roughly 99% of total establishments in NAICS 313221 in the 1997 Census. In 2005, there were an estimated 221 establishments in NAICS 313210.

<sup>[e]</sup>Those establishments in SIC 2250 and 2252 comprised 100% of establishments in NAICS 315111, establishments in SIC 2252 comprised 100% of establishments in NAICS 315119, establishments in SIC 2253 and 2259 comprised 100% of establishments in NAICS 315191, establishments in SIC 2254 and 2259 comprised 100% of establishments in NAICS 315192, establishments in SIC 2257 comprised 100% of establishments in NAICS 313241 (143), establishments in SIC 2258 and 2259 comprised 100% of establishments in NAICS 313249, and establishments in SIC 2258 and 2259 comprised 50% of establishments in NAICS 313312.

<sup>[f]</sup>Those establishments in SIC 2281 comprised roughly 95% of total establishments in NAICS 313111 in the 1997 Census. In 2005, there were an estimated 301 establishments in NAICS 313111.

<sup>[g]</sup>Those establishments in SIC 2282 comprised 100% of establishments in NAICS 313112 and roughly 3% of establishments in NAICS 313312 in the 1997 Census. In 2005, there were an estimated 130 establishments in NAICS 313112 and 441 establishments in NAICS 313312.

<sup>[h]</sup>Those establishments in SIC 2284 comprised roughly 98% of total establishments in NAICS 313113 and roughly 4% of total establishments in NAICS 313312 in the 1997 Census. In 2005, there were an estimated 74 establishments in NAICS 313113 and 441 establishments in NAICS 313312.

<sup>[h]</sup>The previous ICR update estimated that there were 1,972 total establishments and 7 establishments processing cotton. The agencies updated figures estimate 1,102 total establishments, or a 44.1% reduction in total establishments. This 44.1% reduction was then applied to the original number of establishments processing cotton (7).

**Table 2: Estimated Number of Exposed Employees in Textile Operations That Process Cotton (Including Knitting Mills)**

NAICS	Industry Sector	No. of Employees <sup>[a]</sup>	No. of Employees in Establishments Processing Cotton	% of Employees Exposed to Cotton Dust <sup>[b]</sup>	No. of Employees Exposed to Cotton Dust
313210	Broadwoven Cotton Weaving	24,451	17,115	77	13,179
313210	Broadwoven Synthetic Weaving	27,786	5,835	77	4,493
313221	Narrow Fabric Weaving	9,840	1,279	77	985
315111	Knitting Mills	5,856	—	—	353
315119		17,858			
315191		8,037			
315192		1,432			
313241		10,923			
313249		7,687			
313312		8,726			
313111	Yarn Spinning	31,995	5,759	77	4,434
313112	Winding and Throwing	18,073	930	77	716
313312		524			
313113	Thread Mills	2,064	1,685	77	1,297
313312		699			
<b>TOTAL</b>					<b>25,457</b>

<sup>[a]</sup>Source: U.S. Census Bureau, 2005 County Business Patterns Survey. Employment totals were derived using the ratios used in Table 1 to determine the number of establishments in each industry sector. Thus, if a given industry sector in Table 1 comprises 50% of the total number of establishments in a NAICS industry, it was assumed that the industry sector also comprised 50% of the employees.

<sup>[b]</sup>Source: The CAI Report.

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.

Exposure monitoring (§1910.1043(d))

Alternative cotton-dust sampler (§1910.1043(d)(1))

During the previous clearance period, no employers requested OSHA's opinion regarding an alternative cotton-dust sampler. Therefore, the Agency believes that no employer will make such a request during the clearance period covered by this ICR, and is not taking burden hours and cost for this paperwork requirement.

Initial, periodic, and additional monitoring (§1910.1043(d)(2) and (d)(3))

OSHA assumes that employers monitor each employee exposed to cotton dust during textile operations an average of once a year; this average includes initial, periodic, and additional exposure monitoring. From Table 2, the Agency estimates 25,457 employees are exposed to cotton dust. As described in the Regulatory Impact Analysis (RIA) for the final Standard (December 17, 1985, published at 50 FR 51120), employers use six vertical elutriators (or equivalent samplers) to assess representative cotton-dust exposures for a group of 15 employees, for a total of 1,697 samples each year (i.e., 25,457 exposed employees ÷ 15 employees per sample × 1 sample per year). In addition, the Agency estimates that an in-house industrial-hygiene technician takes two hours (2.00 hours) to assemble, check, and disassemble the samplers used for each group of employees, resulting in total annual burden-hour and cost estimates of:

Burden hours: 1,697 samples × 2 hours = 3,394 hours

Cost: 3,394 hours × \$26.12 = \$88,651

Employee notification (§1910.1043(d)(4))

The standard requires employers to notify employees of their exposure-monitoring results. Notification must occur within 15 days after the employer receives the results either by providing each employee with a written copy of their results or by posting the results in an appropriate location that is accessible to the employees. OSHA believes that such notification requires a secretary five minutes (.08 hour) to prepare and post the results for the 384 employers (Table 1). Accordingly, the total annual burden-hour and cost estimates for this paperwork requirement are:

Burden hours: 384 employers × .08 hour = 31 hours

Cost: 31 hours × \$23.14 = \$717

## Methods of compliance (§1910.1043(e))

### Compliance program (§1910.1043(e)(3))

OSHA assumes that no new establishments will process cotton during the clearance period covered by this ICR. Therefore, only existing establishments with poor maintenance or new processes that result in employee exposures above the PEL will update their written compliance programs. Accordingly, the Agency estimates, consistent with the previous ICR, that 10 establishments must revise their written compliance programs each year, and that a supervisor requires about one hour (1.00 hour) to update such a program. Thus, the total burden-hour and cost estimates for this paperwork requirement each year are:

$$\begin{aligned}\text{Burden hours: } & 10 \text{ facilities} \times 1.00 \text{ hour} = 10 \text{ hours} \\ \text{Cost: } & 10 \text{ hours} \times \$48.17 = \$482\end{aligned}$$

### Work practices (§1910.1043(g))

As noted in the previous determination for compliance programs above, OSHA assumes that this ICR will cover only existing cotton-processing establishments. Therefore, no employer will have to develop and implement a written program of work practices to minimize employee cotton-dust exposure during the clearance period covered by the ICR. Accordingly, the Agency is not taking any burden hours or cost for this paperwork requirement.

### Medical surveillance (§1910.1043(h))

#### Initial examinations (§1910.1043(h)(2))

With an annual employee turnover rate of 31.4%<sup>25</sup>, employers hire 7,993 new employees for textile operations each year (i.e., 25,457 existing employees  $\times$  31.4% turnover rate). The two non-textile operations, cotton-seed processing and cotton-waste recycling, have yearly employee turnover rates of 35%<sup>26</sup> and 31.4%<sup>27</sup>, respectively; accordingly, the cottonseed processing industry has 88 new employees annually (i.e., 250 employees  $\times$  35% turnover rate), while 340 new employees enter the cotton-waste-recycling industry annually (i.e., 1,082 existing employees  $\times$  31.4% turnover rate). Therefore, the total number of new employees hired each year for textile and non-textile operations is 8,421; each of these new employees must receive an

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<sup>25</sup>Source: U.S. Bureau of Labor Statistics, Job Openings and Labor Turnover Survey (JOLTS) 2004-2007. This value represents the average total separations rate for manufacturing industries in the United States from 2004 to 2007.

<sup>26</sup>This value was provided as an estimate by the National Cottonseed Products Association.

<sup>27</sup>In consultation with the Secondary Materials and Recycled Textiles Association (SMART), the Agency was unable to identify a unique employee turnover rate for this industry. As a result, the Agency assumes that employee turnover in the cotton-waste recycling industry is the same as manufacturing industries in the United States as a whole.



initial medical examination. Assuming that an employee takes one and one-half hours (1.50 hours) of paid time to complete an initial medical examination at an offsite medical facility,<sup>28</sup> the estimated total annual burden hours and cost of this requirement are:

$$\begin{aligned} \text{Burden hours: } & 8,421 \text{ examinations} \times 1.50 \text{ hours} = 12,632 \text{ hours} \\ \text{Cost: } & 12,632 \text{ hours} \times \$22.25 = \$281,062 \end{aligned}$$

#### Periodic examinations (§1910.1043(h)(3))

Consistent with the previous ICR, OSHA assumes that 54% (13,747) of the 25,457 employees exposed to cotton dust during textile operations have exposures above the AL and, therefore, must receive at least an annual periodic medical examination.<sup>29</sup> In addition, only employees who remain with an employer for at least a year require an annual periodic medical examination (i.e., new employees, who constitute 31.4% (4,317) of the employees exposed above the AL during textile operations, are exempt from these examinations for one year from the date of hire). Therefore, a total of 9,430 of these employees must receive an annual periodic medical examination (i.e., 13,747 employees exposed above the AL – 4,317 new employees exposed above the AL).

The remaining 46% (11,710) of exposed employees involved in textile operations have cotton-dust exposures at or below the AL; employers must administer a periodic medical examination to these employees at least once every two years. With an annual turnover rate of 31.4%, OSHA estimates that 5,511<sup>30</sup> of these employees are available two years after the hiring date for the required medical examination; assuming that employers administer these examinations evenly over any two-year period, then 2,756 of these employees obtain the examination each year.

OSHA assumes that exposed employees involved in non-textile operations have no cotton-dust exposures above the AL; therefore, these employees must receive a periodic medical examination at least once every two years. With an annual turnover rate of 35%, the Agency estimates that 106 exposed employees engaged in cottonseed processing operations are available two years after the hiring date for the required medical examination. The 1,082 employees in the cotton-waste-recycling industry have a turnover rate of 31.4%, indicating that 509 of these employees are available two years after the hiring date for periodic medical examinations. If employers distribute these examinations equally over any two-year period, then 308 (i.e.,  $106 +$

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<sup>28</sup>This time includes 30 minutes to travel to and from the offsite facility, and an additional hour to administer an examination. Many employers use offsite medical facilities because employees can receive their initial medical examinations individually (i.e., in a piecemeal fashion), thereby avoiding the wasted time and inefficiencies associated with establishing a permanent onsite medical facility or arranging for a mobile medical facility (e.g., a van).

<sup>29</sup>The Agency is using this percentage (54%) because it has no recent information describing cotton-dust exposures among employees involved in textile operations.

<sup>30</sup>This number (5,511) was calculated using the following equation:  $11,710 \text{ exposed employees at or below the AL} \times 68.6\% = 8,033 \text{ (first year)}, 8,033 \times 68.6\% \text{ (second year)} = 5,511 \text{ exposed employees.}$

509) ÷ 2) of these employees receive the examination each year.

The Agency assumes that an employee takes one hour (1.00 hour) of paid time to complete a periodic medical examination at an onsite medical facility.<sup>31</sup> With a total of 12,494 periodic medical examinations to administer each year,<sup>32</sup> the Agency estimates the annual burden hours and cost of this requirement to be:

Burden hours: 12,494 examinations × 1.00 hour = 12,494 hours  
Cost: 12,494 hours × \$22.25 = \$277,992

#### Information provided to the physician (§1910.1043(h)(4))

The Agency believes that, for each medical examination administered to an employee, it takes a secretary five minutes (.08 hour) to compile the required information and provide it to the physician. With a total of 20,915 medical examinations to administer each year (i.e., 8,421 initial examinations and 12,494 periodic examinations), the estimated total annual burden hours and cost of this provision are:

Burden hours: 20,915 examinations × .08 hour = 1,673 hours  
Cost: 1,673 hours × \$23.14 = \$38,713

#### Physician's written opinion (§1910.1043(h)(5))

OSHA assumes a secretary spends five minutes (.08 hour) delivering a copy of the physician's written opinion to each employee who receives a medical examination, as well as maintaining a record of the opinion. For the 20,915 medical examinations that employees receive each year, the estimated total annual burden hours and cost of this requirement are:

Burden hours: 20,915 opinions × .08 hour = 1,673 hours  
Cost: 1,673 hours × \$23.14 = \$38,713

#### Employee education and training (§1910.1043(i))

OSHA believes the 25,457 exposed employees involved in textile operations receive either initial or refresher training each year.<sup>33</sup> In addition, the Agency assumes that, for each training

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<sup>31</sup>These employees would go to a mobile, onsite medical facility (e.g., a van) because they could receive the medical examinations in small groups; under these conditions, employers save the time (30 minutes) and associated cost required for employees to travel to an offsite medical facility, while making optimum use of the onsite facility.

<sup>32</sup>This total consists of 9,430 examinations for textile employees exposed above the AL; 2,756 textile employees exposed at or below the AL; and 308 non-textile employees exposed at or below the AL.

<sup>33</sup>Refresher training is that training employers must provide at least once a year, if a change occurs in an employee's job assignment or work process, or if an employee's performance indicates a need for retraining.

session consisting of 20 employees, a supervisor spends 15 minutes preparing for the training session and one hour providing the required training, for a total of one and one-quarter hours (1.25 hours). With a total of 1,273 training sessions (i.e., 25,457 employees ÷ 20 employees per session), OSHA estimates the total annual burden hours and cost of this training requirement to be:

Burden hours: 1,273 sessions × 1.25 hours = 1,591 hours

Cost: 1,591 hours × \$48.17 = \$76,638

#### Signs (§1910.1043(j))

The provisions containing the paperwork requirements associated with signs specify the design, format, and specific language for these materials. Therefore, OSHA is taking no burden for these provisions because it is providing the information needed by employers to meet these requirements. (See “Controlling Paperwork Burden on the Public,” 5 CFR 1320.3(c)(2).)

#### Recordkeeping (§1910.1043(k))<sup>34</sup>

##### Exposure measurements (§1910.1043(k)(1))

The Agency assumes that a secretary takes about five minutes (.08 hour) a year to establish and maintain an employee’s exposure-monitoring record. Assuming that 25,457 employees in the textile industry require exposure monitoring (see the determinations for “Initial, Periodic, and Additional Monitoring (§1910.1043(d)(2) and (d)(3))” above), the total annual burden-hours and cost estimates for this requirement are:

Burden hours: 25,457 employees × .08 hour = 2,037 hours

Cost: 2,037 hours × \$23.14 = \$47,136

##### Availability (§1910.1043(k)(3))

OSHA estimates that its compliance officers request records maintained under the Standard during five inspections annually,<sup>35</sup> and that a supervisor spends five minutes (.08 hour) informing the compliance officer of the location of these records.<sup>36</sup> In addition, the Agency

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<sup>34</sup>The Agency is accounting for the medical-surveillance recordkeeping requirements under the determinations for “Physician’s written opinion (§1910.1043(h)(5))” above.

<sup>35</sup>The Agency estimated the number of inspections by determining the inspection rate (1.4%) for all establishments under the jurisdiction of the OSH Act (including both Federal OSHA and approved state-plan agencies), and then multiplied the total number of establishments covered by the Standard (386) by this percentage (i.e., 384 establishments × 1.4% = 5 inspections.)

<sup>36</sup>The Agency assumes, based on previous history, that no NIOSH representative will request these records.

assumes that 10% (2,546) of the covered employees in the textile and non-textile industries (i.e., 25,457 covered employees  $\times$  10% = 2,546 employees) or their designated representatives request access to these records each year. OSHA estimates that a secretary requires five minutes (.08 hour) to make the requested record available to each employee. Therefore, the total yearly burden hours and cost associated with making the required records available to OSHA compliance officers and employees is:

Burden hours: (5 inspection-related requests  $\times$  .08 hour) + (2,546 employee-related requests  $\times$  .08 hour) = 204 hours  
Cost: (1 hour  $\times$  \$48.17 (supervisor)) + (204 hours  $\times$  \$23.14 (secretary)) = \$4,740

#### Transfer of records (§1910.1043 (k)(4))

Based on previous ICRs, NIOSH does not receive exposure monitoring or medical surveillance records from employers in the industries covered by the Standard. However, to account for possible future transfers, OSHA assumes that these employers transfer three sets of records to NIOSH, and that a secretary spends one hour (1.00 hour) preparing and sending each set of records for the employer. Therefore, the Agency estimates the total annual burden hours and cost of this requirement to be:

Burden hours: 3 sets of records  $\times$  1.00 hour = 3 hours  
Cost: 3 hours  $\times$  \$23.14 per hour = \$69

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 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.

## Capital-Cost Determinations

From these determinations (described below), the Agency estimates that the total capital cost of these requirements each year is \$3,519,494. This total consists of \$173,094 for analyzing exposure-monitoring samples, and \$3,346,400 to administer medical examinations.

### (A) Exposure monitoring (§1910.1043(d))

This ICR update assumes the average cost for an OSHA-accredited laboratory to analyze a sample of airborne cotton dust is about \$17.<sup>37</sup> As noted above under Initial, Periodic, and Additional Monitoring (§1910.1043(d)(2) and (d)(3)) in Item 12, industrial-hygiene technicians conduct 1,697 collections using six vertical elutriators per collection (for a total of 10,182 samples; i.e., 6 vertical elutriators × 1,697 collections). Therefore, the annual cost to analyze the 10,182 samples collected each year is:

$$\text{Cost: } 10,182 \text{ samples} \times \$17 = \$173,094$$

### (B) Medical surveillance (§1910.1043(h))

This ICR update assumes the cost of a medical examination required by the Standard to be \$160.<sup>38</sup> As noted above under Information provided to the physician (§1910.1043(h)(4)) in Item 12 above, the establishments covered by the Standard administer a total of 20,915 medical examinations each year, resulting in the following annual cost:

$$\text{Cost: } 20,915 \text{ examinations} \times \$160 = \$3,346,400$$

- 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.**

The Agency estimates that the total annual cost to the Federal government is \$57, which consists of \$51.53 (\$52, rounded) for OSHA compliance officers to review the required records during inspections, and \$5 for NIOSH to process records received from employers. Other costs, such as

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<sup>37</sup>The previous ICR estimated the cost to analyze a sample of cotton dust to be \$16. The Consumer Price Index (CPI) indicated a 6.3% increase in the price of professional medical services from 2005 to 2007; the cost to analyze an air sample was assumed to have increased by 6.3% as well.

<sup>38</sup>The previous ICR estimated the cost of a medical examination to be \$150. The Consumer Price Index (CPI) indicated a 6.3% increase in the price of professional medical services from 2005 to 2007; the cost of a medical examination was assumed to have increased by 6.3% as well.

equipment, overhead, and support staff expenses, would occur without these collections of information requirements; therefore, OSHA considers these costs to be normal operating expenses.

### **Recordkeeping (§1910.1043(k))**

#### **Availability (§1910.1043(k)(3))**

According to footnote 17, OSHA conducts eight inspections each year of the establishments covered by the Standard. The Agency estimates that a compliance officer (GS-12, step 5), at an hourly wage rate of \$37.89 (including benefits), spends about ten minutes (.17 hour) during an inspection reviewing the paperwork requirements of the Standard. Therefore, the cost of this task is:

$$\text{Cost: } 8 \text{ inspections} \times .17 \text{ hour} \times \$37.89 = \$52$$

#### **Transfer of records (§1910.1043(k)(4))**

Based on the determinations made under Transfer of records (§1910.1029 (k)(4)) in Item 12 above, OSHA estimates that NIOSH processes three sets of records received from employers covered by the Standard. Assuming that a NIOSH secretary (at a wage rate of \$19.26 per hour) requires five minutes (0.08 hour) processing each set of records, the total cost of this requirement is:

$$\text{Cost: } 3 \text{ sets of records} \times .08 \text{ hour} \times \$19.26 = \$5$$

### **15. Explain the reasons for any program changes or adjustments reporting in Items 13 or 14 of the OMB Form 83-I.**

The Agency is requesting a reduction of 34,576 burden hours from 70,318 hours to 35,742 hours. The reduction is due to the Agency updating data in Table 2 – Estimated Number of Establishments in Textile Operations That Process Cotton (Including Knitting Mills) and Table 3 – Estimated Number of Exposed Employees in Textile Operations That Process Cotton (Including Knitting Mills). In Table 2 there was a decrease in the number of establishments (from 535 establishments to 384 establishments) and in Table 3 there was a decrease in the

number of exposed employees (from 49,628 exposed employees to 25,457 exposed employees) in textile operations that process cotton (including knitting mills).

The Agency has also decreased the cost for exposure monitoring from \$6,526,314 to \$3,519,494 a total decrease of \$3,006,820. The cost decrease was based on the reduction of laboratory samples (from 19,854 to 10,182) and medical examinations (from 41,391 to 20,915). The number of laboratory samples and medical examinations reduced as the result of the reduction in the number of exposed employees as stated in the paragraph above.

Specifically, the Agency had updated Table 2 “*Estimated Number of Exposed Employees in Textile Operations That Process Cotton (Including Knitting Mills)*,” that decreased the number of covered employees by 2,740 employees (from 52,368 to 49,628 covered employees).

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

OSHA will not publish the information collected under §1910.1043.

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

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

- 18. Explain each exception to the certification statement identified in Item 19 per "Certification for Paperwork Reduction Act Submission," of OMB Form 83-I.**

OSHA is not requesting an exception to the certification statement in Item 19.

**Table 3****Summary of Burden-Hour and Cost Estimates**

<b>Information Collection Requirement</b>	<b>Existing Burden Hours</b>	<b>Proposed Burden Hours</b>	<b>Change in Hours</b>	<b>Estimated Cost</b>
<b>Exposure monitoring</b>				
Alternative Cotton-Dust Sampler	0	0	0	\$0
Initial, Periodic, and Additional Monitoring	6,618	3,394	-3,224	\$88,651
Employee Notification	43	31	-12	\$717
<b>Methods of Compliance</b>				
Compliance Program	10	10	0	\$482
<b>Respirator Protection</b>				
Respirator Program	0	0	0	\$0
<b>Work Practices</b>	0	0	0	\$0
<b>Medical Surveillance</b>				
Initial Examinations and Periodic Examinations	49,553	25,126	-24,427	\$559,054
Information Provided to the Physician	3,311	1,673	-1,638	\$38,713
Physician's Written Opinion	3,311	1,673	-1,638	\$38,713
<b>Employee Education and Training</b>	3,101	1,591	-1,510	\$76,638
<b>Signs</b>	0	0	0	\$0
<b>Recordkeeping</b>				
Exposure Measurements and Medical Surveillance	3,970	2,037	-1,933	\$47,136
Availability	398	204	-194	\$4,740
Transfer of Records	3	3	0	\$69
<b>TOTALS</b>	<b>70,318</b>	<b>35,742</b>	<b>-34,576</b>	<b>\$854,913</b>