

**SUPPORTING STATEMENT FOR INFORMATION COLLECTION  
REQUIREMENTS FOR THE STANDARD ON  
OCCUPATIONAL EXPOSURE TO NOISE (29 CFR 1910.95)<sup>1, 2</sup>  
(Office of Management and Budget)  
(OMB) Control No. 1218-0048  
(December 2016)**

**A. JUSTIFICATION**

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

The Occupational Safety and Health Act's (OSH Act) main objective is to ". . . assure so far as possible every working man and woman in the Nation safe and healthful working conditions and to preserve our human resources" (29 U.S.C. 651). To achieve this objective, the OSH Act specifically authorizes "the development and promulgation of occupational safety and health standards" (29 U.S.C. 651).

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

In 1972, pursuant to its statutory authority under Section 6(a) of the OSH Act, OSHA adopted a standard regulating occupational exposure to noise at 29 CFR 1910.95 (the Standard, or the Noise Standard). This Standard had no collections of information. On March 8, 1983, the Hearing Conservation Amendment was added to the existing Noise Standard. The Hearing Conservation Amendment contained collections of information subject to the Office of Management and Budget (OMB) review under the Paperwork Reduction Act.

The Noise Standard, as amended in 1983, requires employers to: monitor worker exposure to

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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, and does not provide information or guidance on how to comply with or to enforce the Standard.

<sup>2</sup>The Construction and Shipyard Employment standards (29 CFR 1926.52 and 29 CFR 1915.95, respectively) incorporate 29 CFR 1910.95 by reference.

noise when it is likely that such exposures may equal or exceed 85 decibels measured on the A scale (dBA) on an 8-hour time-weighted average (TWA) (action level); to take action to reduce noise exposure above the 90 dBA permissible exposure limit (PEL) to 90dBA or below; and to provide an effective hearing conservation program (HCP) for all workers exposed to noise at a level greater than, or equal to, a TWA of 85 dBA. The HCP contains: annual audiometric testing for workers; a provision for providing hearing protection devices to exposed workers; education and training of exposed workers; and maintenance of records pertaining to noise exposure-monitoring and audiometric testing. Items 2 and 12 below describe the specific information collection requirements of the Standard.

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

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

#### **A. Monitoring (§1910.95(d))**

**Monitoring (§1910.95(d)(1))** - When information indicates that any worker's exposure may equal or exceed an 8-hour time-weighted average of 85 decibels, the employer shall develop and implement a monitoring program.

*§1910.95(d)(1)(ii)* - Where circumstances such as high worker mobility, significant variations in sound level, or a significant component of impulse noise make area monitoring generally inappropriate, the employer shall use representative personal sampling to comply with the monitoring requirements of this paragraph unless the employer can show that area sampling produces equivalent results.

*§1910.95(d)(2)(i)* - All continuous, intermittent and impulsive sound levels from 80 decibels to 130 decibels shall be integrated into the noise measurements.

*§1910.95(d)(2)(ii)* - Instruments used to measure employee noise exposure shall be calibrated to ensure measurement accuracy.

**§1910.95(d)(3)** - Monitoring shall be repeated whenever a change in production, process, equipment or controls increases noise exposures to the extent that:

*§1910.95(d)(3)(i)* - Additional employees may be exposed at or above the action level; or

*§1910.95(d)(3)(ii)* - The attenuation provided by hearing protectors being used by employees may be rendered inadequate to meet the requirements of paragraph (j) of this section.

**Purpose:** Noise monitoring in the workplace is necessary for the following reasons: (1) to identify workers for whom hearing protection is mandatory; (2) to determine the amount of attenuation that hearing protectors need to provide; and, (3) to familiarize both employers and workers with the degree of noise hazard.

### **B. Employee Notification (§1910.95(e))**

The employer shall notify each worker exposed at or above an 8-hour (TWA) of 85 decibels of the results of the monitoring.

**Purpose:** Consistent with section 8(c)(3) of the OSH Act, every worker has the right to know what their exposure level is and whether it is above or below the AL. Moreover, since the PEL is one that also considers feasibility and, therefore, is not necessarily a “safe” level, it is necessary for workers to know the level of noise exposure to which they were exposed. Additionally, when exposures are above the PEL, the employer must take action to reduce noise exposure to the PEL and provide an effective hearing conservation program for all workers exposed to noise at a level greater than, or equal to, the TWA of 85 dBA. This requirement is necessary to assure workers that the employer is making every effort to furnish them with a safe and healthful work environment as required by section 8(c)(3) of the OSH Act.

### **C. Audiometric testing program (§1910.95(g))**

**§1910.95(g)(1)** - The employer shall establish and maintain an audiometric testing program as provided in this paragraph by making audiometric testing available to all workers whose exposures equal or exceed an 8-hour time-weighted average of 85 decibels.

**§1910.95(g)(3)** - Audiometric tests shall be performed by a licensed or certified audiologist, otolaryngologist, or other physician, or by a technician who is certified by the Council of Accreditation in Occupational Hearing Conservation, or who has satisfactorily demonstrated competence in administering audiometric examinations, obtaining valid audiograms, and properly using, maintaining and checking calibration and proper functioning of the audiometers being used. A technician who operates microprocessor audiometers does not need to be certified. A technician who performs audiometric tests must be responsible to an audiologist, otolaryngologist or physician.

**§1910.95(g)(4)** - All audiograms obtained pursuant to this section shall meet the requirements of Appendix C: "Audiometric Measuring Instruments."

#### **Baseline audiogram (§1910.95(g)(5))**

**§1910.95(g)(5)(i)** - Within 6 months of an employee's first exposure at or above the

action level, the employer shall establish a valid baseline audiogram against which subsequent audiograms can be compared.

*§1910.95(g)(5)(ii)* - Where mobile test vans are used to meet the audiometric testing obligation, the employer shall obtain a valid baseline audiogram within 1 year of an employee's first exposure at or above the action level. Where baseline audiograms are obtained more than 6 months after the employee's first exposure at or above the action level, employees shall wearing hearing protectors for any period exceeding six months after first exposure until the baseline audiogram is obtained.

*§1910.95(g)(5)(iii)* - Testing to establish a baseline audiogram shall be preceded by at least 14 hours without exposure to workplace noise. Hearing protectors may be used as a substitute for the requirement that baseline audiograms be preceded by 14 hours without exposure to workplace noise.

*§1910.95(g)(5)(iv)* - The employer shall notify employees of the need to avoid high levels of non-occupational noise exposure during the 14-hour period immediately preceding the audiometric examination.

***Annual audiogram (§1910.95(g)(6))*** - At least annually after obtaining the baseline audiogram, the employer shall obtain a new audiogram for each worker exposed at or above an 8-hour time-weighted average of 85 decibels.

***Evaluation of audiogram (§1910.95(g)(7))***

*§1910.95(g)(7)(i)* - Each employee's annual audiogram shall be compared to that employee's baseline audiogram to determine if the audiogram is valid and if a standard threshold shift as defined in paragraph (g)(10) of this section has occurred. This comparison may be done by a technician.

*§1910.95(g)(7)(ii)* - If the annual audiogram shows that an employee has suffered a standard threshold shift, the employer may obtain a retest within 30 days and consider the results of the retest as the annual audiogram.

*§1910.95(g)(7)(iii)* - The audiologist, otolaryngologist, or physician shall review problem audiograms and shall determine whether there is a need for further evaluation. The employer shall provide to the person performing this evaluation the following information:

*§1910.95(g)(7)(iii)(A)* - A copy of the requirements for hearing conservation as set forth in paragraphs (c) through (n) of this section;

§1910.95(g)(7)(iii)(B) - The baseline audiogram and most recent audiogram of the employee to be evaluated;

§1910.95(g)(7)(iii)(C) - Measurements of background sound pressure levels in the audiometric test room as required in Appendix D: Audiometric Test Rooms.

§1910.95(g)(7)(iii)(D) - Records of audiometer calibrations required by paragraph (h)(5) of this section.

**Purpose:** Audiometric testing is an integral part of hearing conservation. Since the hearing loss process tends to occur gradually, a worker often does not realize that he or she is developing a hearing loss until significant hearing damage has occurred. A permanent noise induced threshold shift is irreversible. The baseline audiogram serves as a reference point to which subsequent audiograms can be compared. The annual audiogram detects shifts in hearing level, indicates the need for follow-up procedures, identifies workers who are particularly susceptible to hearing loss, monitors the effectiveness of hearing protectors, and detects medical problems. It is important to identify deterioration of hearing before hearing impairment becomes too debilitating. Thus, baseline and annual tests are necessary to reduce material impairment.

***Follow-up procedures (§1910.95(g)(8))***

§1910.95(g)(8)(i) - If a comparison of the annual audiogram to the baseline audiogram indicates a standard threshold shift as defined in paragraph (g)(10) of this section has occurred, the employee shall be informed of this fact in writing, within 21 days of the determination.

§1910.95(g)(8)(ii) - Unless a physician determines that the standard threshold shift is not work related or aggravated by occupational noise exposure, the employer shall ensure that the following steps are taken when a standard threshold shift occurs:

§1910.95(g)(8)(ii)(A) - Employees not using hearing protectors shall be fitted with hearing protectors, trained in their use and care, and required to use them.

§1910.95(g)(8)(ii)(B) - Employees already using hearing protectors shall be refitted and retrained in the use of hearing protectors and provided with hearing protectors offering greater attenuation if necessary.

§1910.95(g)(8)(ii)(C) - The employee shall be referred for a clinical audiological evaluation or an otological examination, as appropriate, if additional testing is necessary or if the employer suspects that a medical pathology of the ear is caused or aggravated by the wearing of hearing protectors.

§1910.95(g)(8)(ii)(D) - The employee is informed of the need for an otological examination if a medical pathology of the ear that is unrelated to the use of hearing protectors is suspected.

§1910.95(g)(8)(iii) - If subsequent audiometric testing of an employee whose exposure to noise is less than an 8-hour TWA of 90 decibels indicates that a standard threshold shift is not persistent, the employer:

§1910.95(g)(8)(iii)(A) - Shall inform the employee of the new audiometric interpretation; and

§1910.95(g)(8)(iii)(B) - May discontinue the required use of hearing protectors for that employee.

**Purpose:** Written notice to a worker who has suffered an STS is a more formal fashion of notification that prevents any misunderstandings or ambiguities.

Informing workers of the need for an otological exam and of new audiometric interpretations provides important information to workers so that they may become involved in their own hearing protection efforts.

#### **E. Access to information and training materials (§1910.95(l))**

§1910.95(l)(1) - The employer shall make available to affected employees or their representatives copies of this standard and shall also post a copy in the workplace.<sup>3</sup>

§1910.95(l)(2) - The employer shall provide to affected employees any informational materials pertaining to the standard that are supplied to the employer by the Assistant Secretary.

§1910.95(l)(3) - The employer shall provide, upon request, all materials related to the employer's training and education program pertaining to this standard to the Assistant Secretary and the Director.<sup>4</sup>

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<sup>3</sup> Employers maintaining a copy of the Regulation, and making copies readily available, upon request, to employees, and distributing to current employees any informational materials concerning this Regulation which are made available to the employer by the Assistant Secretary of Labor for Occupational Safety and Health are exempt from the definition of a collection of information since "the public disclosure of information originally supplied by the Federal government to the recipient for the purpose of disclosure is not included in this definition" (5 CFR 1320.3(c)(1)).

<sup>4</sup> "Director" means the Director of the National Institute for Occupational Safety and Health (NIOSH), U.S. Department of Health and Human Services, or designee.

**Purpose:** Allowing workers to have access to training materials ensures that the employer provided them with the required information and training, thereby assuring that the workers can minimize or eliminate workplace exposure to Noise. The requirement to provide the training materials to OSHA compliance officers ensures that the training materials are correct and meet the requirements of the provision.

Employers must make copies of the Standard available in the workplace and post the Standard. Posting the Standard is exempt from the Paperwork Reduction Act of 1995's (PRA-95) definition of a "collection of information" since the Standard can be obtained from OSHA for public disclosure (5 CFR §1320.3(c)(2)). Burden hours and costs for employers to provide access to training materials as well as other records required by the Standard are included in Item 12 below under "Employee Access (§1910.95(m)(4))."

#### **F. Recordkeeping (§1910.95(m))**

**Exposure measurements (§1910.95(m)(1))** - The employer shall maintain an accurate record of all employee exposure measurements required by paragraph (d) of this section.

#### **Audiometric tests (§1910.95(m)(2))**

§1910.95(m)(2)(i) - The employer shall retain all employee audiometric test records obtained pursuant to paragraph (g) of this section:

§1910.95(m)(2)(ii) - This record shall include:

§1910.95(m)(2)(ii)(A) - Name and job classification of the employee;

§1910.95(m)(2)(ii)(B) - Date of the audiogram;

§1910.95(m)(2)(ii)(C) - The examiner's name;

§1910.95(m)(2)(ii)(D) - Date of the last acoustic or exhaustive calibration of the audiometer; and

§1910.95(m)(2)(ii)(E) - Employee's most recent noise exposure assessment.

§1910.95(m)(2)(ii)(F) - The employer shall maintain accurate records of the measurements of the background sound pressure levels in audiometric test rooms.

**Record retention (§1910.95(m)(3))** - The employer shall retain records required in this paragraph (m) for at least the following periods:

§1910.95(m)(3)(i) - Noise exposure measurement records shall be retained for two years.

§1910.95(m)(3)(ii) - Audiometric test records shall be retained for the duration of the affected employee's employment.

***Access to records (§1910.95(m)(4))***

§1910.95(m)(4)(i) - All records required by this section shall be provided upon request to employees, former employees, representatives designated by the individual employee, and the Assistant Secretary. The provisions of 29 CFR 1910.1020 (a)-(e) and (g) apply to access to records under this section.

**Purpose:** Workers and worker representatives use these records to assess worker medical status over the course of employment and to evaluate the effectiveness of the employer's exposure-reduction program.

Usually, OSHA requests access to records during an inspection. Information collected by the Agency during the investigation is not subject to the PRA under 5 CFR 1320.4(a)(2). Therefore, OSHA takes no burden or cost in Items 12 or 14 of this Supporting Statement for disclosing information during an inspection.

***Transfer of records (§1910.95(m)(5))***

If the employer ceases to do business, the employer shall transfer to the successor employer all records required to be maintained by this section, and the successor employer shall retain them for the remainder of the period prescribed in paragraph (m)(3) of this section.

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

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

In addition, OSHA accounts for the burden hours and costs resulting from the employee



notification requirements under the Information Collection Request (ICR) for its Access to Employee Exposure and Medical Records Standard (§1910.1020), OMB Control No. 1218-0065.

**3. Describe whether, and to what extent, the collection of information involves the use of automated, electronic, mechanical, or other technological collection techniques or other forms of information technology, e.g., permitting electronic submission of responses, and the basis for the decision for adopting this means of collection. Also, describe any consideration of using information technology to reduce burden.**

Employers may use improved information technology when establishing and maintaining the required records. OSHA wrote the collections of information 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 A.2 above.**

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

**5. If the collection of information impacts small businesses or other small entities, describe any methods used to minimize burden.**

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

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

The information collection frequencies specified by the Standard are the minimum frequencies necessary to ensure that employers and OSHA can effectively monitor noise exposure and the hearing status of workers exposed to noise.

**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 §1910.95(g)(8) requires the employer to notify workers in writing within 21 days, from the time of the STS determination is made, that their audiometric test results showed a STS.

**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.**

Pursuant to the Paperwork Reduction Act (44 U.S.C. 3506(c)(2)(A)), OSHA published a notice in the Federal Register on October 4, 2016 (81 FR 68457) soliciting comments from the public and other interested parties on the collections of information contained in the Noise Standard (Docket No. OSHA-2010-0017). The notice is part of a preclearance consultation program that provides interested parties with an opportunity to comment on OSHA's request for an extension by the Office of Management and Budget (OMB) of a previous approval of the information collection requirements found in the above standard.

OSHA received one comment that did not pertain to this ICR. The commenter suggests that employees are being exposed to high levels of noise outside the workplace (i.e, outside bars with loud music) and this complicates employers' abilities to determine if employee hearing is being impacted by their workplace. OSHA notes that employers must use the rules in 29 CFR 1904.5, OSHA's recordkeeping regulation, to determine if the hearing loss is work-related. If an event or exposure in the work environment either caused or contributed to the hearing loss, or

significantly aggravated a pre-existing hearing loss, employers must consider the case to be work-related.

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

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

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

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

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

Perceived questions/information of a sensitive nature may be included in the employee medical exams and records required by the standard. This medical information is necessary for the PLHCP, or employer, to determine what protections an employer must take to ensure that the employee will have minimal occupational exposure to hazards.

**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.**
- **Provide estimates of annualized cost to respondents for the hour burdens for collections of information, identifying and using appropriate wage-rate categories. The cost of contracting out or paying outside parties for information activities should not be included here. Instead, this cost should be included in Item 14.**

### **Summary of Annual Burden**

The burden hours are based on the Regulatory Impact Analysis (RIA) of the final revisions to the Occupational Exposure to Noise Standard and discussions with OSHA's Office of Regulatory Analysis, as well as other OSHA staff.

OSHA has increased the number of establishments and workers by 5.6 %. The 5.6% increase reflects that virtually all sectors affected by the Noise Standard are in manufacturing; and, that the number of workers in manufacturing has increased from 10.7 million in 2010 to 11.3 million in 2013<sup>5</sup>

The following table provides information on the number and size of facilities and the noise exposure levels to workers.

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<sup>5</sup> U.S. Census Bureau, 2013 County Business Patterns (CB1400A11). (The Agency rounded the percentage increase to 5.6%)

**Table 1**

**Number of Establishments, Workers, and Exposed Levels by Size of Establishment**

Number of Workers per Establishment	1-19	20-49	50-99	100-249	250+
Number of Establishments	149,136	34,132	16,998	13,500	7,837
Total Number of Workers	860,282	1,066,832	1,191,421	2,078,089	5,205,212
Number of Workers exposed above 80dBA	498,104	577,081	640,645	1,101,858	2,721,540
Number of Workers exposed above 85 dBA	341,446	377,769	421,225	717,710	1,736,762

**Wage Rates**

The Agency determined average wage rates for individuals in the Noise Standard using hourly earnings, including benefits, to represent the cost to workers' time. OSHA adopted the mean hourly wage rates from the *Occupational Employment Statistics, May 2015 National Occupational Employment and Wage Estimates, United States*, Bureau of Labor Statistics, U.S. Department of Labor.<sup>6</sup> To account for fringe benefits, we used the fringe benefit rate reported in BLS' Employer Costs for Employee Compensation (ECEC) news release for [December 2015](#) (BLS, 2016).<sup>7</sup> BLS reported that for private industry, fringe benefits accounted for 31.3 percent of total compensation and wages accounted for the remaining 68.7 percent. To calculate the loaded hourly wage for each occupation, thus we divide the mean hourly wage by 68.7 percent. These hourly wages<sup>8</sup> are:

1 <sup>st</sup> Line Supervisor (51-1011)	\$41.93
Clerical Worker/Secretary (43-6014)	\$24.62
Chemical Technician (19-4031)	\$34.10
Worker (51-0000)	\$25.34

6 Source: [http://www.bls.gov/oes/current/oes\\_nat.htm](http://www.bls.gov/oes/current/oes_nat.htm) .

7 Source: [http://www.bls.gov/oes/current/oes\\_nat.htm](http://www.bls.gov/oes/current/oes_nat.htm).

8 Source: The Bureau of Labor Statistics, National Occupational Employment and Wage Estimates United States, May 2015. Occupational Codes and Titles (mean hourly wage): 51-1011, Professional manager (\$28.81); 51-000, Worker (\$17.41); 43-6014, Secretaries and Administrative Assistants, Except Legal, Medical and Executive (\$16.92); 19-4031, Chemical Technician (\$23.43). [http://www.bls.gov/oes/current/oes\\_nat.htm](http://www.bls.gov/oes/current/oes_nat.htm).

## **Burden-Hour and Cost Determinations**

The following sections summarize the methodology used for estimating the number of burden hours and costs resulting from the information collection requirements of the Standard. Table 4 below, at the end of Item 12, summarizes each of the requested burden hour adjustments.

### **(A) Noise Level Monitoring (§1910.95(d))**

The Standard allows employers to use either area or personal noise sampling techniques to identify workers who must be included in the Hearing Conservation Plan (HCP). OSHA assumes one-half of the establishments use area monitoring and the other half use personal monitoring to determine worker noise exposure level.

#### Area Monitoring

Based on the typical frequency of process and equipment changes in manufacturing, OSHA estimates that each establishment conducts noise exposure-monitoring on average once every four years (.25). The RIA estimated 26% of the establishments employing more than 100 workers, were conducting noise exposure-monitoring as a matter of usual and customary business practice before promulgation of the hearing conservation amendment. Therefore, the number of establishments in size categories “100 to 249 workers” and “250 or more workers” is 26% less than on Table 1. The Agency estimates that a chemical technician (a technician), earning \$34.10 an hour, takes 8 hours to conduct monitoring for those firms with less than 250 workers, and 16 hours for those firms with 250 or more workers.

**Burden Hours: 221,854**

**Table 2**

<b>Firm Size</b>	<b>Number of Establishments</b>	<b>Half of Establishments conduct Area Monitoring</b>	<b>Frequency (once every 4 years)</b>	<b>Technician Time (hours)</b>	<b>Burden Hours</b>
1-19	149,136	0.5	0.25	8	149,136
20-49	34,132	0.5	0.25	8	34,132
50-99	16,998	0.5	0.25	8	16,998
100-249	9,990	0.5	0.25	8	9,990
250	5,799	0.5	0.25	16	11,598
<b>Totals</b>	<b>216,055</b>				<b>221,854</b>

**Cost:** 221,854 hours x \$34.10 = \$7,565,221

Personal Monitoring

OSHA estimates that one-half of all establishments, where workers experience 85 dBA or more of noise exposure, conduct personal monitoring an average of once every 4 years. OSHA assumes employers will conduct representative noise measurements, rather than actual measurements of each worker. Thus, measurement of the exposure of one worker may be used to represent other similarly exposed workers.

The number of workers that are monitored varies with the nature of the industrial process and the diversity of the work areas and tasks. Based on OSHA's broad experience with noise surveys in numerous industrial establishments, estimates have been developed of the percentages of workers to be measured to provide representative exposure for each size establishment.

The Agency estimates that a technician takes one hour per measured worker to select representative workers, to make daily dosimeter calibrations, to place and to remove the dosimeter from the individual worker. The total burden for personal monitoring is estimated to be 198,356 burden hours. Assuming a technician with an hourly wage rate of \$34.10, performs this tasks, the total cost is estimated to be \$6,763,940.

**Burden hours: 198,356**

Table 3

Firm Size	Total Number of Workers exposed to 85 dBA	Half of Establishments conduct Personal Monitoring	Percentage of workers being monitored	Frequency (once every 4 years)	Technician Time (hours)	Burden Hours
1-19	341,446	0.5	1	0.25	1	42,681
20-49	377,769	0.5	0.6	0.25	1	28,332
50-99	421,225	0.5	0.5	0.25	1	26,327
100-249	717,710	0.5	0.4	0.25	1	35,886
250	1,736,762	0.5	0.3	0.25	1	65,129
<b>Totals</b>	<b>3,594,912</b>					<b>198,356</b>

**Cost:** 198,356 hours x \$34.10 = \$6,763,940

**(B) Employee Notification of Exposure (§1910.95(e))**

Employers must notify the worker when his or her noise exposure exceeds the 8-hour TWA of 85 dBA. Employers may choose how they inform their workers (i.e., either written or oral notification). Some employers may provide individual written notifications to the worker while others may post the notifications, or orally inform a group of workers. For the purposes of this clearance, the Agency estimates, on average, a clerical person takes 2 minutes (.03 hour) to inform each affected worker.

**Burden hours:** 3,594,912 workers x .03 hour = 107,847 hours

**Cost:** 107,847 hours x \$24.62 = \$2,655,193

**(C) Audiometric Testing Program (§1910.95(g))**

Employers must establish and maintain an audiometric testing program to provide audiometric testing to all workers whose exposures equal or exceed an 8-hour time weighted average of 85 decibels.

To estimate burden hours and costs for the audiometric testing program, the number of establishments was divided into three categories: small (1-49 workers), medium (50-249 workers) and large (250 or more workers). Every worker required to be included in the hearing



conservation program must be tested initially to establish a baseline measurement. Audiometric examinations are provided annually thereafter to determine whether hearing has been affected. See Table 3 above for breakdown.

(1) Small Establishments (1-49 workers)

OSHA estimates that 183,268 small establishments employ 719,215 workers who are exposed above 85 dBA. Small establishments will send one half or 359,608 of their workers to facilities outside the workplace for audiometric examinations.<sup>9</sup> OSHA estimates a worker takes 1 hour to travel to the testing site, take the audiometric exam and return to the workplace. OSHA assumes the remaining 359,608 will receive audiometric examinations by mobile testing vans. Each examination conducted via mobile testing van is estimated to take 15 minutes (.25 hour).

**Burden hours:** 359,608 workers tested outside workplace x 1 hour =  
359,608 hours

**Burden hours:** 359,608 workers tested via mobile van x .25 hour =  
89,902 hours

**Total Burden hours:** 449,510 hours

**Cost:** 449,510 hours x 25.34 = \$11,390,583

(1) Medium Establishments (50 – 249 workers)

The Agency estimates that the 30,498 medium establishments employ 1,138,935 workers who have noise exposure above 85 dBA that must be tested. OSHA assumes these establishments have mobile testing vans visit their facilities to conduct the audiometric examinations. Each test is estimated to take 15 minutes (.25 hour).

**Burden hours:** 1,138,935 workers x .25 hour = 284,734 hours

**Cost:** 284,734 hours x \$25.34 = \$7,215,160

(3) Large Establishments (250 or more workers)

OSHA assumes that 7,837 large establishments have purchased their own audiometric testing equipment and are conducting their own noise monitoring. OSHA estimates that

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<sup>9</sup>Based on OSHA's stakeholder meetings on Hearing Loss in Construction, discussions with mobile health service providers and Canadian health officials were virtually all workers of small employers receive annual hearing tests from mobile testing vans, OSHA estimates that 50% of small establishments will have their workers hearing tested by a mobile testing van service.

each test takes 15 minutes (.25 hour) of a worker's time and 15 minutes (.25 hour) of a technician's time to administer each test, for a total 30 minutes (.5 hour) per examination. Based on the 1983 RIA, OSHA assumed that large establishments provide audiometric tests for 20 percent of workers prior to the Standard; therefore, for those workers receiving audiometric testing, the Agency considers it a normal and customary business practice. The Agency estimates that there are 1,389,410 (1,736,762 x 80%) workers in large establishments exposed above 85 dBA being tested each year.

**Burden hours:** 1,389,410 examinations x .5 hour = 694,705 hours  
**Cost:** 1,389,410 x .25 hour x \$25.34 (worker) = \$ 8,801,912  
 1,389,410 x .25 hour x \$34.10 (technician) = \$11,844,720  
 Total \$20,646,632

**Total Burden Hours and Cost for Audiometric Testing Programs**

	BURDEN HOUR	COST
Small Establishments	449,510	\$ 11,390,583
Medium Establishments	284,734	\$ 7,215,160
Large Establishments	694,705	\$20,646,632
<b>TOTAL</b>	<b>1,428,949</b>	<b>\$39,252,375</b>

**Employee Notification of Standard Threshold Shift (STS)**

As part of the follow-up procedure, employers must notify each worker, in writing, whose annual audiogram shows that a STS has occurred (as compared with the worker's baseline audiogram) within 21 days of this interpretation. OSHA assumes that 10 percent of the 3,594,912 audiograms will show an STS has occurred.<sup>10</sup> A clerk will take, on average, 2 minutes (.03 hour) to prepare each notification, since many employers will use computer generated form notifications.

**Burden hours:** 3,594,912 audiograms x 10% x .03 hour = 10,785 hours  
**Cost:** 10,785 hours x \$24.62 = \$265,527

**Follow-up Procedures (§1910.95(g)(8))**

In addition to notifying workers that they have experienced a STS, employers must provide a follow-up referral to an audiologist, otolaryngologist, or physician if the employer suspects that a medical pathology of the ear is caused or aggravated by the use of hearing protectors.

<sup>10</sup>The sum of the number of workers receiving audiograms in the following establishment sizes: small 719,215; medium 1,138,935; and large 1,736,762.

Employers must also notify workers of the need for an otological examination if a medical pathology of the ear that is unrelated to the use of hearing protectors is suspected. These establishments (small, medium, and large) total 3,594,912 workers exposed above 85 dBA. The Agency estimates 5 percent (179,746) of the 3,594,912 workers tested will require a referral, or notification of the need for an otological examinations and that it will require 1 minute (.02 hour) of a manager's time to provide a copy of the affected worker's record for each referral, or to notify the worker of the otological examination.

**Burden hours:** 179,746 workers x .02 hour = 3,595 hours  
**Cost:** 3,595 hours x \$41.93 = \$150,738

### **Evaluation of Audiograms (§1910.95(g)(7))**

Employers must provide to the person performing the evaluation of the audiogram the following information: 1) a copy of the requirements for the hearing conservation in paragraphs (c) through (n) of the Standard; 2) the worker's baseline audiogram and most recent audiogram of the worker to be evaluated; 3) measurements of background sound pressure levels in the audiometric test room as required in Appendix D; Audiometric Test Rooms; and 4) records of audiometer calibrations required by paragraph (h)(5) of the Standard.

Items 3 and 4 pertain to the hearing test booth or room where the audiogram will be conducted. Since small and medium employers contract out audiograms, they do not expend time to develop this information. Rather, these employers would incur this in the per unit cost of a worker's audiogram.

OSHA estimates a clerical worker takes 2 minutes (.03 hour) to provide items 1 and 2 to the contractor for the 1,858,150 affected workers (719,215 workers in small establishments + 1,138,935 workers in medium establishments). OSHA assumes that, in most instances, employers will continue to use the same contractor, and the contractor will already have much of the required information.

**Burden hours:** 1,858,150 workers x .03 hour = 55,745 hours  
**Cost:** 55,745 hours x \$24.62 = \$1,372,442

For large companies, OSHA assumes the audiogram is performed in-house; therefore, these employers must calibrate the audiometer (paragraph (h)(5)), and generate a record as required by paragraph (g)(7).

OSHA estimates that each of the 7,837 large firms' technicians takes 20 minutes (.33 hour) per year to calibrate their audiometric testing equipment.

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**Burden hours:** 7,837 firms x .33 hour = 2,586 hours  
**Cost:** 2,586 hours x \$34.10 = \$88,183

**Total Burden Hours and Cost for Evaluation of Audiograms**

**Burden hours:** 55,745 hours + 2,586 hours = **58,331 hours**  
**Cost:** \$1,372,442 hours + \$88,183 = **\$1,460,625**

**(D) Recordkeeping (§1910.95(m))**

(1) Exposure records and retention (§1910.95(m)(1))

Based on data in the Noise Regulatory Impact Analysis, OSHA assumes that a clerical worker takes 5 minutes (.08 hour) per worker to process exposure measurement records and that this processing will occur once every 4 years.

**Burden hours:**  $3,594,912 \text{ workers} / 4 \times .08 \text{ hour} = 71,898 \text{ hours}$   
**Cost:**  $71,898 \text{ hours} \times \$24.62 = \$1,770,129$

(2) Audiometric tests (§1910.95(m)(2))

The employer must maintain and update each worker's audiometric testing record for the duration of the affected worker's employment. OSHA assumes that a clerical worker will take 1 minute (.02 hour) per worker per year to update and maintain the records for the duration of the workers' employment.

**Burden hours:**  $3,594,912 \times .02 \text{ hour} = 71,898 \text{ hours}$   
**Cost:**  $71,898 \text{ hours} \times \$24.62 = \$1,770,129$

(3) Employee access (§1910.95(m)(4))

OSHA estimates that approximately 10% of the 5,539,228 potentially affected workers<sup>11</sup> will annually request access to their records and that each request will require approximately 1 minute (.02 hour) of clerical time.

**Burden hours:**  $5,539,228 \text{ workers} \times .10 \times .02 \text{ hour} = 11,078 \text{ hours}$   
**Cost:**  $11,078 \text{ hours} \times \$24.62 = \$272,740$

(4) Federal records access (§1910.95(m)(4))

See Item 2.

**Table 4**  
**Summary of Total Burden Hours and Cost Estimates**

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<sup>11</sup>Potentially affected workers are those workers who are exposed above 80 dBA.

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Collection of Information Activity	Current Burden Hours	Requested Burden Hours	Change	Cost under Item 12	Reason for Change
<b>A. Noise Level Monitoring</b>					
Area Monitoring	209,851	221,854	12,003	\$7,565,221	There was an increase in the number of establishments conducting area monitoring (from 209,851 to 221,854).
Personal Monitoring	187,835	198,356	10,521	\$6,763,940	There was an increase in the number of establishments conducting personal monitoring (from 3,404,273 to 3,594,912).
<b>B. Employee Notification of Exposures</b>	102,128	107,847	5,719	\$2,655,193	There was an increase in the number of establishments conducting personal monitoring (from 3,404,273 to 3,594,912).
<b>C. Audiometric Testing Program</b>	1,353,172	1,428,949	75,777	\$39,252,375	There were increases in the number of small, medium and large establishments resulting in more workers needing tests. (Small - from 173,549 to 183,268; medium- from 1,078,537 to 1,138,935; large - from 1,164,489 to 1,389,410. )
Employee Notification of Standard Threshold Shift (STS)	10,213	10,785	572	\$265,527	There was an increase in the number of annual audiograms showing an STS has occurred (from 3,404,273 audiograms to 3,594,912).
Follow-up Procedures	3,404	3,595	191	\$150,738	There was an increase in the number of annual audiograms showing an STS has occurred (from 3,404,273 audiograms to 3,594,912).
Evaluation of Audiograms	55,237	58,331	3,094	\$1,460,625	There was an increase in the number of annual audiograms showing an STS has occurred (from 3,404,273 audiograms to 3,594,912).
<b>D. Recordkeeping</b>					

Collection of Information Activity	Current Burden Hours	Requested Burden Hours	Change	Cost under Item 12	Reason for Change
Exposure Records and Retention	68,085	71,898	3,813	\$1,770,129	Exposure records and retention - There was an increase in the number of exposure records (from 3,404,273 to 3,594,912).
Audiometric Tests	68,085	71,898	3,813	\$1,770,129	Audiometric Tests – There was an increase in the number of audiometric testing records (from 3,404,273 to 3,594,912).
Employee Access	10,491	11,078	587	\$272,740	Worker access - There was an increase in the number of potentially affected workers (from 5,245,480 to 5,539,228).
Federal Records Access	235	0	-235	\$0	
<b>Totals</b>	<b>2,068,736</b>	<b>2,184,591</b>	<b>115,855</b>	<b>\$61,926,617</b>	

**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.**

OSHA estimates that the total annual cost to respondents is \$31,242,929 which consists of off-site and on-site audiometric testing for workers.

Small establishments will incur costs when half of their 719,215 workers 359,608 are sent outside the workplace for audiometric exams fees. OSHA estimates that each off-site audiometric examination costs \$34.37<sup>12</sup>.

The remaining half of small establishment workers and all medium establishment workers will be tested in a mobile van. Mobile testing services charge between \$11.25 and \$16.88 per worker depending on volume and tests and usually last around 15 minutes (.25 hour).<sup>13</sup> Since small establishments have fewer workers to test, they would likely pay the higher rate of \$16.88 while medium establishments would likely pay a lower price of \$11.25 per person. Large establishments are assumed to have in house testing equipment and, therefore, the costs are composed of the time of the technician and the worker to take the test. The wage and hour cost are taken under Item 12.

Small Establishment Workers: 359,608 workers x \$34.37 = \$12,359,727

Small Establishment Workers: 359,608 workers x \$16.88 = \$6,070,183

Medium Establishment Workers: 1,138,935 workers x \$11.25 = \$12,813,019

**Total Cost:** \$12,359,727 + 6,070,183 + \$12,813,019 = \$31,242,929

- 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.**

Usually, OSHA requests access to records during an inspection. Information collected by the Agency during the investigation is not subject to the PRA under 5 CFR 1320.4(a)(2). Therefore, OSHA takes no burden or cost in Item 14 of this Supporting Statement for disclosing information during an inspection.

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<sup>12</sup>For the 2010 ICR, OSHA contacted occupational health centers across the country to determine mobile testing service charges and estimated that each off-site audiometric examination costed \$30.55. The Consumer Price Index (CPI) indicates a 12.5% increase in the price of professional medical services from 2010 to 2015; the cost of the audiometric examination was assumed to have increased by 12.5% as well. (Source: <http://www.bls.gov/cpi/cpid1607.pdf> , Table 26).

<sup>13</sup>For the 2010 ICR, OSHA contacted occupational health centers to determine conversations with offsite mobile testing services across the country and estimated that testing services ranged from \$10.00 for a medium establishment to \$15.00 for a small establishment. The Consumer Price Index (CPI) indicates a 12.5% increase in the price of professional medical services from 2010 to 2015; the cost of the mobile testing services was assumed to have increased by 12.5% as well. (Source: <http://www.bls.gov/cpi/cpid1607.pdf> , Table 26).



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

OSHA is requesting an adjustment increase of burden hours associated with the collections of information in the Standard from 2,068,736 hours to 2,184,591 (a total increase of 115,855 hours). Table 4 above describes each of the requested burden hour adjustments.

The Agency is also requesting an adjustment increase in the cost under Item 13 from \$26,296,876 to \$31,242,929 (a total increase of \$4,946,053).

OSHA has increased the number of establishments and workers by 5.6%. The 5.6 % increase reflects that virtually all sectors affected by the Noise Standard are in manufacturing and, that the number of workers overall in manufacturing increased from to 10.7 million in 2010 to 11.3 million in 2013, according to U.S. Census Bureau statistics.

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

OSHA will not publish the information collected under the Standard.

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

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

**18. Explain each exception to the certification statement.**

OSHA is not seeking an exception to the certification statement.

**B. COLLECTION OF INFORMATION EMPLOYING STATISTICAL METHODS.**

This supporting statement does not contain any collection of information requirements that employ statistical methods.