

**SUPPORTING STATEMENT FOR INFORMATION COLLECTION
REQUIREMENTS FOR THE STANDARD ON
OCCUPATIONAL EXPOSURE TO NOISE (29 CFR 1910.95)^{1, 2}
(Office of Management and Budget (OMB) Control No. 1218-0048)
(April 2010)**

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). This Standard had no paperwork requirements. On March 8, 1983, the Hearing Conservation Amendment was added to the existing Noise standard. The Hearing Conservation Amendment contained paperwork and information disclosure requirements 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 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

¹The 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.

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

noise exposures to the 90 dBA permissible exposure limit (PEL); 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.

D. Training program (§1910.95(k))

§1910.95(k)(1) - The employer shall train each employee who is exposed to noise at or above an 8-hour time-weighted average of 85 decibels in accordance with requirements of this section. The employer shall institute a training program and ensure employee participation in the program.

§1910.95(k)(2) - The training program shall be repeated annually for each employee included in the hearing conservation program. Information provided in the training program shall be updated to be consistent with changes in protective equipment and work processes.

§1910.95(k)(3) - The employer shall ensure that each employee is informed of the following:

§1910.95(k)(3)(i) - The effects of noise on hearing;

§1910.95(k)(3)(ii) - The purpose of hearing protectors, the advantages, disadvantages, and attenuation of various types, and instructions on selection, fitting, use, and care; and

§1910.95(k)(3)(iii) - The purpose of audiometric testing, and an explanation of the test procedures.

Purpose: Worker training is important because when workers understand the reasons for the hearing conservation program's requirements and the need to protect their hearing, they are better motivated to actively participate in the program and to cooperate by wearing their protectors and taking audiometric tests.

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.

§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.³

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.

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.

³“Director” means the Director of the National Institute for Occupational Safety and Health (NIOSH), U.S. Department of Health and Human Services, or designee.

§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: The OSHA compliance officer uses these records to assess employer compliance with the major requirements of the Standard, while NIOSH may compile these records for research purposes. 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.

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.

Purpose: Transferring records to successor employers and NIOSH ensures that workers will have access to their historical records and to evaluate the effectiveness of their employer's exposure-reduction program.

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 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 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.

As required by the Paperwork Reduction Act of 1995 (44 U.S.C. 3506(c)(2)(A)), OSHA published a Federal Register on May 5, 2010 (75 FR 24746, Docket No. OSHA-2010-0017) soliciting comments from the public and other interested parties on the information collection requirements contained in the Standard on Exposure to Noise (29 CFR 1910.95). This notice was part of a preclearance consultation program that provides interested parties with an opportunity to comment on OSHA's request for an extension by OMB of a previous approval of the information collection requirements found in the Noise Standard. The Agency did not receive any comments regarding the proposed information collection request.

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

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

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

To ensure that the personal information contained in medical records required by the Standard remains confidential, the Agency developed 29 CFR 1913.10 ("Rules of Agency Practice and Procedure Concerning OSHA Access to Employee Medical Records") 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 require the collection of sensitive information.

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

- **Indicate the number of respondents, frequency of response, annual hour burden, and an explanation of how the burden was estimated. Unless directed to do so, agencies should not conduct special surveys to obtain information on which to base hour burden estimates. Consultation with a sample (fewer than 10) of potential respondents is desirable. If the hour burden on respondents is expected to vary widely because of differences in activity, size, or complexity, show the range of estimated hour burden, and explain the reasons for the variance. Generally, estimates should not include burden hours for customary and usual business practices.**
- **If this request for approval covers more than one form, provide separate hour burden estimates for each form and aggregate the hour burdens.**
- **Provide estimates of annualized 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 13.**

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 reduced the number of establishments and workers by 8.3%. The 8.3% reduction reflects that virtually all sectors affected by the Noise Standard are in manufacturing; and, that the number of workers in manufacturing has decreased from 14.5 million in 2006 to 13.3 million today.⁴

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

⁴2007 Economic Census

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	175,656	40,202	20,021	15,900	9,230
Total Number of Workers	1,013,260	1,256,540	1,403,283	2,447,621	6,130,819
Number of Workers exposed above 80dBA	586,678	679,699	754,566	1,297,793	3,205,492
Number of Workers exposed above 85 dBA	402,163	444,945	496,128	845,336	2,045,598

Wage Rates

The Agency determined average wage rates using average hourly earnings. For the relevant occupational categories, OSHA adjusted the mean hourly earnings from Table 11 of the September 2009 *Employer Costs of Employee Compensation* by the Bureau of Labor Statistics to allow for fringe benefits, which comprise about 30.3% of total compensation in the private sector. With wages comprising 69.7% of worker compensation, the Agency multiplied wages by 1.435 (1/0.697) to derive at total hourly worker compensation. Therefore, the costs of labor used in this analysis are estimates of total hourly compensation. These estimates are:

Professional/Manager	\$48.06
Clerical/Secretary	\$23.63
Chemical technician ⁵	\$30.16
Worker	\$29.15

⁵May 2008 *Occupational Employment Statistics*, "Chemical Technician," SOC Code: 19-4031. U.S. Department of Labor, Bureau of Labor Statistics.

Table 2
Summary of Burden Hours and Cost Estimates

Information Collection Activity	Current Burden Hours	Requested Burden Hours	Change (Adjustments)	Costs under Item 12
A. Noise level monitoring				
Area monitoring	284,956	261,305	-23,651	\$7,880,959
Personal monitoring	254,772	233,626	-21,146	\$7,046,160
B. Employee notification of exposures	138,522	114,752	-23,770	\$2,711,590
C. Audiometric testing	1,835,385	1,683,048	-152,337	\$49,474,059
Notification of a standard threshold shift	12,514	11,475	-1,039	\$271,154
Follow up procedures	4,617	4,234	-383	\$203,486
Evaluation of audiograms	74,921	68,703	-6,218	\$1,643,342
D. Training program	57,718	52,927	-4,791	\$2,543,672
E. Employee Access to information and training materials	0	0	0	\$0.00
F. Recordkeeping				
Exposure records	92,348	84,683	-7,665	\$2,001,059
Audiometric tests	83,425	76,501	-6,924	\$1,807,719
Employee access	14,230	13,048	-1,182	\$308,324
Federal access	319	292	-27	\$14,034
Federal transfer	3	3	0	\$71
TOTALS	2,853,730	2,604,597	-249,133	\$75,905,629

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.

(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 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 technician, earning \$30.16 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:

Firm Size	Number of Establishments	Half of Establishments conduct Area Monitoring	Frequency (once every 4 years)	Technician Time (hours)	Burden Hours
1-19	175,656	0.5	0.25	8	175,656
20-49	40,202	0.5	0.25	8	40,202
50-99	20,021	0.5	0.25	8	20,021
100-249	11,766	0.5	0.25	8	11,766
250	6,830	0.5	0.25	16	13,660
Totals	254,475				261,305

Cost: 261,305 hours x \$30.16 = \$7,880,959

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 233,626 burden hours. Assuming a technician hourly wage rate of \$30.16, the total cost is estimated to be \$7,046,159.

Burden hours:

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	402,163	0.5	1	0.25	1	50,270
20-49	444,945	0.5	0.6	0.25	1	33,371
50-99	496,128	0.5	0.5	0.25	1	31,008
100-249	845,336	0.5	0.4	0.25	1	42,267
250	2,045,598	0.5	0.3	0.25	1	76,710
Totals	4,234,170					233,626

Cost: 233,626 hours x \$30.16 = \$7,046,160

(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 85dBA. 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: 3,825,050 workers x .03 hour = 114,752 hours

Cost: 114,752 hours x \$23.63 = \$2,711,590

(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 1 above for breakdown.

(1) Small Establishments (1-49 workers)

OSHA estimates that 215,858 small establishments employ 847,108 workers who are exposed above 85 dBA. Small establishments will send one half or (423,554) of their workers to facilities outside the workplace for audiometric examinations.⁶ OSHA estimates an worker takes 1 hour to travel to the testing site, take the audiometric exam and return to the workplace. OSHA assumes the remaining 423,554 will receive audiometric examinations by mobile testing vans. Each examination conducted via mobile testing van is estimated to take 15 minutes (0.25 hour).

Burden hours: 423,554 workers tested outside workplace x 1 hour =
423,554 hours

Burden hours: 423,554 workers tested via mobile van x .25 hour =
105,889 hours

Total Burden Hours: 529,443 hours

Cost: 529,443 hours x \$29.15 = \$15,433,263

⁶Based on OSHA's stakeholder meetings on Hearing Loss in Construction, discussions with mobile health service providers and Canadian health officials where 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.

(2) Medium Establishments (50 – 249 workers)

The Agency estimates that the 35,921 medium establishments employ 1,341,464 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: 1,341,464 workers x .25 hour = 335,366 hours

Cost: 335,366 hours x \$29.15 = \$ 9,775,919

(3) Large Establishments (250 or more workers)

OSHA assumes that 9,230 large establishments have purchased their own audiometric testing equipment and are conducting their own noise monitoring. OSHA estimates each test takes 15 minutes of an worker's time and 15 minutes of a technician's time to administer each test, for a total 30 minutes (.5 hour) per examination. Based on the 1983 RIA, OSHA assumes that large establishments provide audiometric tests for 20 percent of workers prior to the Standard; therefore for these workers receiving audiometric testing is a normal and customary business practice. The Agency estimates that there are 1,636,478 (2,045,598 x 80%) workers in large establishments exposed above 85 dBA being tested each year.

Burden hours: 1,636,478 examinations x .5 hour = 818,239 hours

Cost: 1,636,478 x .25 hour x \$29.15 (worker) = \$11,925,833

1,636,478 x .25 hour x \$30.16 (technician) = \$12,339,044

Total \$ 24,264,877

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 3,825,050 audiograms will show an STS has occurred.⁷ 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: 3,825,050 audiograms x 10% x .03 hour = 11,475 hours

Cost: 11,475 hours x \$23.63 = \$271,154

⁷The sum of the number of workers receiving audiograms in the following establishment sizes: small 847,108; medium 1,341,464; and large 1,636,478

Follow-up Procedures (§1910.95(g)(8))

In addition to notifying workers that they have experienced an 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.

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 4,234,170 workers exposed above 85dBA. The Agency estimates 5 percent (211,708) of the 4,234,170 workers tested will require a referral, or notification of the need for an otological examinations and that it will require 1 minute 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: 211,708 workers x .02 hour = 4,234 hours

Cost: 4,234 hours x \$48.06 = \$203,486

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 that 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 an worker's audiogram.

OSHA estimates a secretary takes 2 minutes (0.03 hour) to provide items 1 and 2 to the contractor for the 2,188,572 affected workers (847,108 workers in small establishments + 1,341,464 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: 2,188,572 workers x .03 hour = 65,657 hours

Cost: 65,657 hours x \$23.63 = \$1,551,475

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 each of the 9,230 large firms' technicians take 20 minutes (0.33 hour) per year to calibrate their audiometric testing equipment.

Burden hours: 9,230 firms x 0.33 hour = 3,046 hours

Cost: 3,046 hours x \$30.16 = \$91,867

(D) Training program (§1910.95(k))

Employers must train workers who are exposed to noise at or above an 8-hour time-weighted average of 85 decibels. Training must be repeated annually. The employer must ensure that each worker is informed of the following: (1) The effects of noise on hearing; (2) the purpose of hearing protectors, the advantages, disadvantages, and attenuation of various types, and instructions on selection, fitting, use and care; and (3) the purpose of audiometric testing, and an explanation of the test procedures. In addition, the employer must post the noise regulation in the workplace.

OSHA assumes much of this information is provided to the worker at the time of the worker's annual audiogram and is a normal and customary business practice. For example, the technician during the worker's audiogram would explain at least the purpose of audiometric testing and explanation of the test procedures.

The Agency assumes that a manager spends an additional 15 minutes (0.25 hour) to train or explain to workers any additional information such as the effects of noise on hearing and the purpose of hearing protectors. For purposes of calculating burden hours and costs, OSHA assumes that the training will be conducted in sessions, each session having 20 workers in attendance.

Burden hours: 4,234,170 workers/20 per session x 0.25 hour = 52,927 hours

Cost: 52,927 hours x \$48.06 = \$2,543,672

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

Employers must make copies of the Standard available in the workplace and post the Standard. Posting the Standard is exempt from the PRA 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 below under "Employee Access (§1910.95(m)(4))."

(F) 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 secretary takes 5 minutes (.08 hour) per worker to process exposure measurement records and that this processing will occur once every 4 years.

Burden hours: $4,234,170 \text{ workers}/4 \times 0.08 \text{ hour} = 84,683 \text{ hours}$

Cost: $84,683 \text{ hours} \times \$23.63 = \$2,001,059$

(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 secretary will take 1 minute (0.02 hour) per worker per year to update and maintain the records for the duration of the workers' employment.

Burden hours: $3,825,050 \times 0.02 \text{ hour} = 76,501 \text{ hours}$

Cost: $76,501 \text{ hours} \times \$23.63 = \$1,807,719$

(3) Employee access (§1910.95(m)(4))

OSHA estimates that approximately 10% of the 6,524,229 potentially affected workers⁸ will annually request access to their records and that each request will require approximately 1 minute (0.02 hour) of clerical time.

Burden hours: $6,524,229 \text{ workers} \times .10 \times 0.02 \text{ hr} = 13,048 \text{ hours}$

Cost: $13,048 \text{ hours} \times \$23.63 = \$308,324$

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

On request, employers must provide all records required by the Standard, including audiometric test and worker exposure records to OSHA compliance officers for examination and copying. In addition, in accordance with 1910.1020, employers must provide on request worker noise exposure-monitoring records to affected workers, former workers and designated worker representatives, as well as a worker's audiometric examinations to the worker and to anyone having that worker's specific written consent.

⁸Potentially effected workers are those workers who are exposed above 80 dBA.

The Agency estimates that, among the 261,008 facilities covered by the Standard, its compliance officers make a request for noise-related records during 3,654 facility inspections annually,⁹ and that a professional at the facility will spend 5 minutes (.08 hour) informing an OSHA compliance officer of the location of the requested records during the inspection.

Burden hours: 3,654 inspected facilities x 0.08 hour = 292 hours

Cost: 292 hours x \$48.06 = \$14,034

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

Employers who cease to do business must transfer all records required to be maintained by this Standard to the successor employer. The successor employer must maintain the records required by the Standard. OSHA has no reliable information on the frequency of record transfers between employers and successor employers. To account for any future transfers, OSHA assumes a secretary earning \$23.63 per hour will take 1 hour to prepare and transfer the records.

In addition, when there is no successor employer, the Standard requires that the records must be transferred to NIOSH. NIOSH receives few, if any, noise-related records from employers. To account for any future transfers, OSHA assumes that employers covered by the Standard may transfer 3 sets of records to NIOSH, and that an employer's secretary will spend 1 hour preparing and sending each set of records to NIOSH.

Burden hours: 3 sets of records x 1 hour = 3 hours

Cost: 3 hours x \$23.63 = \$71

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**

⁹OSHA estimated the number of inspections by determining the inspection rate (1.4%) for all facilities under the jurisdiction of the OSH Act (including both Federal OSHA and approved state-plan agencies), and then multiplied the total number of facilities regulated by the Standard by this percentage (i.e., .014% x 261,008= 3,654 inspections (rounded)).

- **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 **\$82,190,075** which consists of off-site and on-site audiometric testing for workers.

Small establishments will incur costs when half of their 847,108 workers are sent outside the workplace for audiometric exams. OSHA estimates that each off-site audiometric examination costs \$30.55¹⁰ in medical fees plus 1 hour of worker travel and test time worth \$29.15 for a total of \$59.70. Total estimated cost is **\$25,286,174** (423,554 workers x \$59.70).

The remaining half of small establishment workers and all medium establishment workers will be tested in a mobile van. Mobile testing services charge between \$10 and \$15 per worker depending on volume and tests usually last around 15 min.¹¹ Since small establishments have fewer workers to test, they would likely pay the higher rate of \$15 while medium establishments would likely pay a lower price of \$10 per person. Added to these charges is the cost of worker time for the test of 0.25 x \$29.15, or \$7.29. Large establishments are assumed to have in house testing equipment and therefore the costs are composed of the time of the technician (0.25 x \$30.16 = \$7.54) and the worker (0.25 x \$29.15 = \$7.29) to take the test.

Small Establishment Workers: 423,554 workers x \$22.29 (\$15 + 7.29) =
\$9,441,019

Medium Establishment Workers: 1,341,464 workers x \$17.29 (\$10 + 7.29) =
\$23,193,913

Large Establishment Workers: 1,636,478 workers x \$14.83 (\$7.54 + \$7.29) =
\$24,268,969

¹⁰ERG estimation derived from telephone conversations with occupational health centers across the country on Feb. 9, 2010.

¹¹ERG estimation derived from telephone conversations with mobile testing services across the country on Feb. 11, 2010.

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.**

Federal access to records

Based on the analysis above under "Federal Records Access" the Agency determined that employers covered by the Standard undergo 3,985 OSHA inspections each year. The Agency estimates that a compliance officer (GS-12/5), with an hourly wage rate of \$40.66, spends 5 minutes (.08 hour) during each inspection reviewing records maintained by employers covered by the Standard. Other costs, such as equipment, overhead, and support-staff expenses, would occur without the collection of information requirements, and OSHA considers these costs to be normal operating expenses.

Burden hours: 3,985 inspections x .08 hour = 319 hours
Cost: 319 hours x \$40.66 = \$12,970

Transfer of records to NIOSH

Employers who cease to do business and who have no successor employer must notify NIOSH in writing of the impending disposal of these records. Also those employers who remain in business for the entire retention period must, before disposing of these records, notify NIOSH of the impending disposal and transfer the records to NIOSH if it requests the records within 3 months of being so notified.

The cost of this provision to the Federal government consists of NIOSH processing records received from employers covered by this requirement. In general, NIOSH does not request any exposure measurements or worker audiometric tests from employers covered by the Standard. However, to account for possible transfers during this clearance period, OSHA assumes that NIOSH will receive 3 sets of records from employers covered by the Standard, and that a clerical worker (GS-7, step 5) with an hourly wage rate of \$17.24 would spend about five minutes (.08 hours) to process each set of records.

Burden hours: 3 sets of records x .08 hours = 1 hour (rounded)
Cost: 1 hour x \$17.24 = \$17

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

OSHA is requesting an adjustment decrease of the burden hours of these paperwork requirements from 2,853,730 burden hours to 2,604,597 hours, a total decrease of -249,133 hours.

The Agency is also requesting a \$41,196,496 increase from \$40,993,579 to \$82,190,075. Although OSHA has reduced the number of establishments and workers by 8.3%, this has been offset by the increased costs of the mobile testing and audiometric testing. The cost of testing at a medium size establishment would be \$10 while the cost of the small establishment would be \$15. The small and medium sized facilities would need a mobile van while a large facility should have in house testing equipment.

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 in item 19.

Table 3 - Summary of Requested Burden Hour Adjustments

Information-Collection Requirement	Current Burden Hours	Requested Burden Hours	Burden Hours Adjustments	Reason for Adjustment
(A) Noise level monitoring				
Area monitoring	284,956	261,305	-23,651	There was a reduction in the number of establishments conducting area monitoring (from 277,508 to 254,475).
Personal monitoring	254,772	233,626	-21,146	There was a reduction in the number of establishments conducting personal monitoring (from 4,617,415 to 4,234,170).
(B) Employee Notification of Exposure	138,522	114,752	-23,770	There was a reduction in the number of establishments conducting personal monitoring (from 4,617,415 to 4,234,170).
(C) Audiometric Testing Program	1,835,385	1,683,048	-152,337	Small establishments – There was a reduction in the number of establishments conducting audiometric testing, resulting in fewer workers needing tests (from 923,782 to 847,108). Medium establishments –

Information-Collection Requirement	Current Burden Hours	Requested Burden Hours	Burden Hours Adjustments	Reason for Adjustment
				There was a decrease in the number of medium establishments, resulting in fewer workers needing tests (from 1,462,883 to 1,341,464). Large establishments – There was a decrease in the number of medium establishments, resulting in fewer workers needing tests 1,784,600 to 1,636,478).
Employee Notification of Standard Threshold Shift (STS)	12,514	11,475	-1,039	There was a decrease in the number of annual audiograms showing an STS has occurred (from 417,127 to 382,505 audiograms).
Follow-up Procedures	4,617	4,234	-383	There was a reduction in the number of establishments exposed above 85dBA (from 4,617,415 to 4,234,170).
Evaluation of Audiograms	74,921	68,703	-6,218	Small and medium establishments There was a decrease in the number of affected workers (from 2,386,665 to 2,188,572 affected workers). Large establishments There was a decrease in the number of affected establishments (from 10,065 to 9,230).
(D) Training Program	57,718	52,927	-4,791	There was a reduction in the number of establishments exposed above 85dBA (from 4,617,415 to 4,234,170).
(F) Recordkeeping	190,325	174,528	-15,797	Exposure records and retention - There was a reduction in the number exposure records (from 4,617,415 to 4,234,170). Audiometric tests – There was a decrease in the number of audiometric testing records (from 4,171,265 to 3,825,050). Worker access - There was a decrease in the number of potentially affected workers (from 7,114,753 to 6,524,229). Federal records access - There was a decrease in the number of facilities covered by the Standard (from 284,633 to 261,008).
TOTAL	2,853,730	2,604,597	-249,133	