

**SUPPORTING STATEMENT FOR INFORMATION COLLECTION  
REQUIREMENTS FOR THE OCCUPATIONAL  
EXPOSURE TO NOISE (29 CFR 1910.95)  
(Office of Management and Budget (OMB) Control No. 1218-0048(2007))<sup>1, 2</sup>**

**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 employee 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 employee exposure to potentially toxic materials or other harmful physical agents which are required to be monitored and measured," and further requires that employers notify employees 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 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 employee 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 noise exposures to the 90 dBA permissible exposure limit (PEL); and to provide an effective hearing conservation program (HCP) for all employees exposed to noise at a level greater than,

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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.

or equal to, a TWA of 85 dBA. The HCP contains: annual audiometric testing for employees; a provision for providing hearing protection devices to exposed employees; education and training of exposed employees; 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 employee'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 employees 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 employees with the degree of noise hazard.

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

The employer shall notify each employee 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 Act, every employee 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 employees 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 employees exposed to noise at a level greater than, or equal to, the TWA of 85 dBA. This requirement is necessary to assure employees 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 employees 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 employee 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 employees 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 an employee that has suffered an STS is a more formal fashion of notification that prevents any misunderstandings or ambiguities.

Informing employees of the need for an otological exam and of new audiometric interpretations provides important information to employees 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 institute a training program for all employees who are exposed to noise at or above an 8-hour time-weighted average of 85 decibels, and shall ensure employee participation in such 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:** Employee 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.<sup>3</sup>

**Purpose:** Allowing employees to have access to training materials ensures that the employer provided them with the required information and training, thereby assuring that the employees 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.

§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.

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<sup>3</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.

***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. Employees and employee representatives use these records to assess employee 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 employees 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 employee involved, and no other source or agency duplicates these requirements or can make the required information available to OSHA (i.e., the required information is available only from employers).

- 5. If the collection of information impacts small businesses or other small entities (Item 5 of OMB Form 83-I), describe any methods used to minimize burden.**

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

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

The 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 employees 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 employees 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 (U.S.C. 3506(c)(2)(A)), OSHA published a notice in the Federal Register on April 27, 2007 (72 FR 21054, OSHA Docket No. OSHA-2007-0022) requesting public comment on its proposal to extend the Office of Management and Budget's approval of the information collection requirements contained in the Occupational Exposure to Noise Standard. This notice was part of a preclearance consultation program that provided the general public and government agencies with an opportunity to comment. The Agency received no comments in response to its notice.

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

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

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

To ensure that the personal information contained in medical records 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 in Item 13 of OMB Form 83-I.**
- **Provide estimates of annualized cost to respondents for the hour burdens for collections of information, identifying and using appropriate wage-rate categories. 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 employees by 25%. The 25% reduction reflects that virtually all sectors affected by the Noise Standard are in manufacturing; and, the number of employees in manufacturing has decreased from 19.5 million in 1980 to 14.5 million today.

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

**Table 1  
Number of Establishments, Employees,  
and Exposed Levels by Size of Establishment**

| Number of Employees per Establishment    | 1-19      | 20-49     | 50-99     | 100-249   | 250+      |
|--|-----------|-----------|-----------|-----------|-----------|
| Number of Establishments                 | 191,555   | 43,841    | 21,833    | 17,339    | 10,065    |
| Total Number of Employees                | 1,104,973 | 1,370,273 | 1,530,298 | 2,669,161 | 6,685,735 |
| Number of Employees exposed above 80dBA  | 639,780   | 741,220   | 822,864   | 1,415,260 | 3,495,629 |
| Number of Employees exposed above 85 dBA | 438,564   | 485,218   | 541,034   | 921,849   | 2,230,750 |

**Wage Rates**

The Agency determined average wage rates using average hourly earnings. For the relevant occupational categories, OSHA adjusted the mean hourly earnings from the June 2005 *National Compensation Survey by the Bureau of Labor Statistics* to allow for fringe benefits, which

comprise about 29.4% of total compensation in the private sector. With wages comprising 70.6% of employee compensation, the Agency multiplied wages by 1.4 (1/0.706) to derive total - hourly employee compensation. Therefore, the costs of labor used in this analysis are estimates of total hourly compensation. These estimates are:

|                      |         |
|----------------------|---------|
| Professional/Manager | \$41.89 |
| Clerical/Secretary   | \$20.44 |
| Chemical technician  | \$25.05 |
| Employee             | \$23.40 |

**Table 2**  
**Summary of Burden Hours and Cost Estimates**

| <b>Information Collection Activity</b>                   | <b>Current Burden Hours</b> | <b>Requested Burden Hours</b> | <b>Change (Adjustments)</b> | <b>Costs #12</b>    |
|--|-----------------------------|-------------------------------|-----------------------------|---------------------|
| A. Noise level monitoring                                |                             |                               |                             |                     |
| Area monitoring  | 379,943                     | 284,956                       | -94,987                     | \$7,138,148         |
| Personal monitoring                                      | 339,696                     | 254,772                       | -84,924                     | \$6,382,039         |
| B. Employee notification of exposures                    | 184,697                     | 138,522                       | -46,175                     | \$2,831,390         |
| C. Audiometric testing                                   | 3,801,208                   | 1,835,385                     | -1,965,823                  | \$43,684,156        |
| Notification of a standard threshold shift               | 33,370                      | 12,514                        | -20,856                     | \$255,786           |
| Follow up procedures                                     | 6,157                       | 4,617                         | -1,540                      | \$193,406           |
| Evaluation of audiograms                                 | 99,851                      | 74,921                        | -24,930                     | \$1,546,695         |
| D. Training program                                      | 76,957                      | 57,718                        | -19,239                     | \$2,417,807         |
| E. Employee Access to information and training materials | 0                           | 0                             | 0                           | 0                   |
| F. Recordkeeping   |                             |                               |                             |                     |
| Exposure records   | 123,131                     | 92,348                        | -30,783                     | \$1,887,593         |
| Audiometric tests  | 111,234                     | 83,425                        | -27,809                     | \$1,705,207         |
| Employee access  | 18,973                      | 14,230                        | -4,743                      | \$290,861           |
| Federal access   | 425                         | 319                           | -106                        | \$13,363            |
| Federal transfer   | 3                           | 3                             | 0                           | \$61                |
| <b>TOTALS</b>  | <b>5,175,645</b>            | <b>2,853,730</b>              | <b>-2,321,915</b>           | <b>\$68,346,512</b> |

**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 employees 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 employee 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 employees, were conducting noise exposure-monitoring as a matter of business practice before promulgation of the hearing conservation amendment. Therefore, the number of firms in size categories “100 to 249 employees” and “250 or more employees” are 26% less than on Table 1. The Agency estimates a technician, earning \$25.05 an hour, takes 8 hours to conduct monitoring for those firms with less than 250 employees, and 16 hours for those firms with 250 or more employees.

**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          | 191,555                  | .5   | .25                            | 8                       | 191,555        |
| 20-49         | 43,841                   | .5   | .25                            | 8                       | 43,841         |
| 50-99         | 21,833                   | .5   | .25                            | 8                       | 21,833         |
| 100-249       | 12,831                   | .5   | .25                            | 8                       | 12,831         |
| 250           | 7,448                    | .5   | .25                            | 16                      | 14,896         |
| <b>Totals</b> |                          |  |                                |                         | <b>284,956</b> |

**Cost:** 284,956 hours x \$25.05 = \$7,138,148

Personal Monitoring

OSHA estimates that one-half of all establishments, where employees 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 employee. Thus, measurement of the exposure of one employee may be used to represent other similarly exposed workers.

The number of employees 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 employees 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 254,772 burden hours. Assuming a technician hourly wage rate of \$25.05, the total cost is estimated to be \$6,382,039.

**Burden hours:**

| <b>Firm Size</b> | <b>Total Number of Employees exposed to 85 dBA</b> | <b>Half of Establishments conduct Personal Monitoring</b> | <b>Percentage of employees being monitored</b> | <b>Frequency (once every 4 years)</b> | <b>Technician Time (hours)</b> | <b>Burden Hours</b> |
|------------------|--|---|--|---------------------------------------|--------------------------------|---------------------|
| 1-19             | 438,564  | .5  | 1  | .25                                   | 1                              | 54,821              |
| 20-49            | 485,218  | .5  | .60  | .25                                   | 1                              | 36,391              |
| 50-99            | 541,034  | .5  | .50  | .25                                   | 1                              | 33,815              |
| 100-249          | 921,849  | .5  | .40  | .25                                   | 1                              | 46,092              |
| 250              | 2,230,750  | .5  | .30  | .25                                   | 1                              | 83,653              |
| <b>Totals</b>    |  |   |  |                                       |                                | <b>254,772</b>      |

**Cost:** 254,772 hours x \$25.05 = \$6,382,039

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

Employers must notify the employee when his or her noise exposure exceeds the 8-hour TWA of 85dBA. Employers may choose how they inform their employees (i.e., either written or oral notification). Some employers may provide individual written notifications to the employee while others may post the notifications, or orally inform a group of employees. For the purposes

of this clearance, the Agency estimates, on average, a clerical person takes 2 minutes (.03 hour) to inform each affected employee.

**Burden hours:** 4,617,415 employees x .03 hour = 138,522 hours  
**Cost:** 138,522 hours x \$20.44 = \$2,831,390

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

Employers must establish and maintain an audiometric testing program to provide audiometric testing to all employees 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 were divided into three categories: small (1-49 employees), medium (50-249 employees) and large (250 or more employees). Every employee 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 employees)

OSHA estimates that 235,396 small establishments employ 923,782 employees who are exposed above 85 dBA. Small establishments will send ½ or (461,891) of their employees to facilities outside the workplace for audiometric examinations<sup>4</sup>. OSHA estimates an employee takes 1 hour to travel to the testing site, take the audiometric exam and return to the workplace. OSHA assumes the remaining 461,891 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:** 461,891 employees tested outside workplace x 1 hour =  
461,891 hours

**Burden hours:** 461,891 employees tested via mobile van x .25 hour =  
115,473 hours

**Total Burden Hours:** 577,364 hours

**Cost:** 577,364 hours x \$23.40 = \$13,510,318

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<sup>4</sup> Based on OSHA's stakeholder meetings on Hearing Loss in Construction, discussions with mobile health service providers and Canadian health officials where virtually all employees of small employers receive annual hearing tests from mobile testing vans, OSHA estimates that 50% of small establishments will have their employees hearing tested by a mobile testing van service.

(2) Medium Establishments (50 – 249 employees)

The Agency estimates that the 39,172 medium establishments employ 1,462,883 employees 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:** 1,462,883 employees x .25 hour = 365,721 hours

**Cost:** 365,721 hours x \$23.40 = \$ 8,557,871

(3) Large Establishments (250 or more employees)

OSHA assumes that 10,065 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 employee'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 employees receiving audiometric testing is a normal and customary business practice. The Agency estimates there are 1,784,600 (2,230,750 – 446,150 (20%)) employees in large establishments exposed above 85 dBA being tested each year.

**Burden hours:** 1,784,600 examinations x .5 hour = 892,300 hours

**Cost:** 1,784,600 x .25 hour x \$23.40 (employee) = \$10,439,910

1,784,600 x .25 hour x \$25.05 (technician) = \$11,176,057

Total \$ 21,615,967

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

As part of the follow-up procedure, employers must notify each employee, in writing, whose annual audiogram shows that a STS has occurred (as compared with the employee's baseline audiogram) within 21 days of this interpretation. OSHA assumes that 10 percent of the 4,171,265 audiograms<sup>5</sup> will show an STS has occurred. 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:** 4,171,265 audiograms x 10% x .03 hour = 12,514 hours

**Cost:** 12,514 hours x \$20.44 = \$255,786

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<sup>5</sup>The sum of the number of employees receiving audiograms in the following establishment sizes: small 923,782; medium 1,462,883; and large 1,784,600.

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

In addition to notifying employees 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 employees 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 4,614,415 employees exposed above 85dBA.

The Agency estimates 5 percent (230,871) of the 4,614,415 employees 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 employees record for each referral, or to notify the employee of the otological examination

**Burden hours:** 230,871 employees x .02 hour = 4,617 hours

**Cost:** 4,617 hours x \$41.89 = \$193,406

### **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 employee's baseline audiogram and most recent audiogram of the employee 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 employee's audiogram.

OSHA estimates a secretary takes 2 minutes (.03 hour) to provide items 1 and 2 to the contractor for the 2,386,665 affected employees (923,782 employees in small establishments + 1,462,883 employees 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:** 2,386,665 employees x .03 hour = 71,600 hours

**Cost:** 71,600 hours x \$20.44 = \$1,463,504

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 10,065 large firms' technician's take 20 minutes (.33 hour) per year

to calibrate their audiometric testing equipment.

**Burden hours:** 10,065 firms x .33 hour = 3,321 hours

**Cost:** 3,321 hours x \$25.05 = \$83,191

**(D) Training program (§1910.95(k))**

Employers must train employees 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 employee 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 employee at the time of the employee's annual audiogram and is a normal and customary business practice. For example, the technician during the employee'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 (.25 hour) to train or explain to employees 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 employees in attendance.

**Burden hours:** 4,617,415 employees/20 per session x .25 hour = 57,718 hours

**Cost:** 57,718 hours x \$41.89 = \$2,417,807

**(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:** 4,617,415 employees/4 x .08 hour = 92,348 hours

**Cost:** 92,348 hours x \$20.44 = \$1,887,593

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

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

**Burden hours:** 4,171,265 x .02 hour = 83,425 hours

**Cost:** 83,425 hours x \$20.44 = \$1,705,207

(3) Employee access (§1910.95(m)(4))

OSHA estimates that approximately 10% of the 7,114,753 potentially affected employees<sup>6</sup> will annually request access to their records and that each request will require approximately 1 minute (.02 hour) of clerical time.

**Burden hours:** 7,114,753 employees x .10 x .02 hr = 14,230 hours

**Cost:** 14,230 hours x \$20.44 = \$290,861

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

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

The Agency estimates that, among the 284,633 facilities covered by the Standard, its compliance officers make a request for Noise-related records during 3,985 facility inspections annually,<sup>7</sup> 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.

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<sup>6</sup>Potentially effected employees are those employees who are exposed above 80 dBA.

<sup>7</sup>OSHA 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 284,633= 3,985 inspections (rounded)).

**Burden hours:** 3,985 inspected facilities x .08 hour = 319 hours

**Cost:** 319 hours x \$41.89 = \$13,363

(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 \$20.44 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 \$20.44 = \$61

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 **\$40,993,579** which consists of off-site audiometric testing for employees.

Small establishments will incur costs when half of their 923,782 employees are sent outside the workplace for audiometric exams. OSHA estimates that each audiometric examination costs \$75.00. Total estimated cost is **\$34,641,825** (461,891 employees x \$75.00).

The remaining half of small establishment employees and all medium establishment employees will be tested in a mobile van. A mobile van costs \$825 for two days and provides 250 audiometric examinations.

Small Establishment Employees: 461,891 employees/250 audiometric examinations x \$825 = **\$1,524,240**

Medium Establishment Employees: 1,462,883 employees/250 audiometric examinations x \$825 = **\$4,827,514**

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 \$36.26, 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 \$36.26 = \$11,567

#### **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 employee 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 to decrease the burden hours of these paperwork requirements from 5,175,645 burden hours to 2,853,730 hours, a total decrease of -2,321,915 hours. Table 3 below describes each of the requested burden hour adjustments.

The Agency is also requesting a \$51,821,282 reduction from \$92,814,861 to \$40,993,579. The reduction is the result of a 25% reduction in the number of employees and manufacturing establishments. Also, we now assume that 50% of small establishment employees will receive audiometric examination via a mobile van. The previous ICR assumed all small establishment employees would go off-site to receive their audiometric examination.

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 identified in Item 19, "Certification for Paperwork Reduction Act Submission," of OMB 83-I.**

OSHA is not seeking an exception to the certification statement in item 19.

**Table 3 - Summary of Requested Burden Hour Adjustments**

| Information-Collection Requirement                      | Responses | Current Burden Hours | Requested Burden Hours | Burden Hours Adjustments | Reason for Adjustment   |
|---|-----------|----------------------|------------------------|--------------------------|---|
| <b>(A) Noise level monitoring</b>                       |           |                      |                        |                          |   |
| Area monitoring   | 34,688    | 379,943              | 284,956                | -94,987                  | There was a reduction in the number of establishments conducting area monitoring (from 379,512 to 277,508).   |
| Personal monitoring                                     | 254,772   | 339,696              | 254,772                | -84,924                  | There was a reduction in the number of establishments conducting personal monitoring (from 6,156,554 to 4,617,415).   |
| <b>(B) Employee Notification of Exposure</b>            | 4,617,415 | 184,697              | 138,522                | -46,175                  | There was a reduction in the number of establishments conducting personal monitoring (from 6,156,554 to 4,617,415).   |
| <b>(C) Audiometric Testing Program</b>                  | 2,386,665 | 3,801,208            | 1,835,385              | -1,965,823               | <p><b>Small establishments -</b><br/>There was a reduction in the number of establishments conducting audiometric testing (from 1,231,709 to 923,782). Additionally, half (461,891) of the small establishments now conduct audiometric testing via mobile van decreasing the time it takes to perform testing from 1 hour to 15 minutes for half of the small establishments to conduct audiometric testing.</p> <p><b>Medium establishments -</b><br/>There was a decrease in the number of medium establishments (from 1,950,511 to 1,462,883). There was additionally, there was a reduction from 30 minutes to 15 minutes for the time required to conduct audiometric testing via mobile van.</p> <p><b>Large establishments -</b><br/>There was a decrease in the number of examinations from 2,379,467 to 1,784,600).</p> |
| Employee Notification of Standard Threshold Shift (STS) | 417,127   | 33,370               | 12,514                 | -20,856                  | There was a decrease in the number of annual audiograms showing an STS has occurred (from 1,112,337 to 417,127 audiograms).   |
| Follow-up Procedures                                    | 230,871   | 6,157                | 4,617                  | -1,540                   | There was a reduction in the number of establishments exposed above 85dBA (from 6,156,554 to 4,617,415).  |
| Evaluation of Audiograms                                | 2,396,730 | 99,851               | 74,921                 | -24,930                  | <p><b>Small and medium establishments</b><br/>There was a decrease in the number of affected employees (from 3,182,220 to 2,386,665 affected employees).</p> <p><b>Large establishments</b><br/>There was a decrease in the number of affected establishments (from 13,285 to 10,065).</p>  |

| Information-Collection Requirement | Responses         | Current Burden Hours | Requested Burden Hours | Burden Hours Adjustments | Reason for Adjustment  |
|------------------------------------|-------------------|----------------------|------------------------|--------------------------|--|
| <b>(D) Training Program</b>        | 230,871           | 76,957               | 57,718                 | -19,239                  | There was a reduction in the number of establishments exposed at or above 85dBA (from 6,156,554 to 4,617,415).   |
| <b>(F) Recordkeeping</b>           | 6,041,082         | 253,766              | 190,325                | -63,441                  | <p><b>Exposure records and retention</b> - There was a reduction in the number exposure records (from 6,156,554 to 4,617,415).</p> <p><b>Audiometric tests</b> - There was a decrease in the number of audiometric testing records (from 5,561,687 to 4,171,265).</p> <p><b>Employee access</b> - There was a decrease in the number of potentially affected employees (from 9,486,338 to 7,114,753).</p> <p><b>Federal records access</b> - There was a decrease in the number of facilities covered by the Standard (from 379,512 to 284,633).</p> |
| <b>TOTAL</b>                       | <b>16,610,221</b> | <b>5,175,645</b>     | <b>2,853,730</b>       | <b>-2,321,915</b>        |  |