Longwood University

Hearing Conservation Program

Administered by Environmental Health and Safety Department

December 2015

Table of Contents

1. Introduction
2. Responsibilities
	1. Environmental Health and Safety Department
	2. Hearing Conservation Program Coordinator
	3. Supervisor
	4. Longwood University Speech, Hearing, and Learning Services
	5. Employees
3. Program Components
	1. Noise Monitoring
		1. Surveyor
		2. Method of Survey
		3. Results
	2. Hearing Protection
	3. Audiometric Testing
		1. Audiometric Testing Center and Evaluator
		2. Baseline Audiogram
		3. Annual Audiogram
		4. Records
	4. Employee Training
4. Program Evaluation

Appendices

1. Definitions and Acronyms
2. Audiometric Testing Clinic Agreement
3. Standard Threshold Shift Notification Letter
4. Noise Comparison Chart
5. Permissible Noise Level Chart
6. Hearing Conservation Program Evaluation Checklist
7. Audiometric Testing Data Sheet
8. Drop From Program Notification Letter
9. Noise Exposure Measurements
10. Noise Dosimetry Data Sheet
11. Noise Monitoring Results Letter
12. Hearing Conservation Training Record
13. Additional Resources
14. Introduction

The Occupational Safety and Health Administration (OSHA) maintains standards in order to “create a safe and healthy work environment.” The Virginia division of OSHA is called Virginia Occupational Safety and Health (VOSH). VOSH standard 1910.95 outlines the requirements of a hearing conservation programing to prevent or eliminate the hazard of noise-induce hearing loss for employees who complete work related tasks in areas of high-level noise exposure.

EH&S admits employees into the Hearing Conservation Program (HCP) when they perform work related tasks that expose them to noise exposure levels that are equal to or greater than 85 decibels (dB) on an A-weighted frequency scale (dBA) over a Time Weighted Average (TWA) of 8 hours. This exposure level, written as 85dBA over an 8-hour TWA, is referred to as the Action Level. The A-weighted frequency scale refers to noise levels that have injurious effects on human hearing.

Noise exposure level is affected by a number of factors including the sound level of exposure in decibels (dB), the duration of exposure to noise, the combination of sound levels if the employee moves between different work-related tasks, and the number of sources by which the noise is produced.

**Simply put: The louder the noise level is for a work-related task, the shorter the duration is for which an employee may conduct the task.**

1. Responsibilities
	1. Environmental Health and Safety Department
		1. Oversee the Hearing Conservation Program and appoint a Hearing Conservation Program Coordinator
		2. Coordinate funding for audiometric testing
		3. Evaluate the Hearing Conservation Program annually to ensure all requirements and standards are met using the Hearing Conservation Program Evaluation Checklist in Appendix F
		4. Maintain records of employee noise exposure measurements for a minimum of two years.
		5. Maintain records of employees who are in the program, which will include the following:
			1. The employee’s name
			2. The employee’s job classification
			3. The employee’s most recent noise exposure assessment
	2. Hearing Conservation Program Coordinator
		1. Administer the Hearing Conservation Program in accordance with the Virginia Occupational Safety and Health (VOSH) standard 1910.95
		2. Develop and implement training programs
		3. Develop informational handouts on hearing conservation and hearing protection and distribute them at training programs
		4. Determine the need for hearing protectors by monitoring the noise levels of work-related tasks
		5. Inform employees of audiometric testing results, especially if a Standard Threshold Shift occurs using the Standard Threshold Shift Notification Letter in Appendix C
		6. Inform supervisors about the results of noise monitoring using Appendix K: Noise Monitoring Results Letter
		7. Inform employees and their respective supervisors when the results of audiometric testing indicate a Standard Threshold Shift
		8. Assist supervisors in providing adequate hearing protection options to employees by identifying approved hearing protection devices
		9. Arrange for employee audiometric testing
		10. Revise the program as necessary following annual evaluations to ensure that the requirements of VOSH standard 1910.95 are met
		11. Maintain records of employee exposure measurements
		12. Ensure noise monitoring equipment are calibrated and serviced
		13. Notify the audiometric testing clinic when an employee is being dropped from the program and no longer requires testing using the Drop From Program Notification Letter in Appendix H
		14. Conduct audits if necessary to identify any violations of the Hearing Conservation Program and initiate corrective actions when necessary
		15. Perform evaluation of employee records within the Hearing Conservation Program once every 10 years
	3. Supervisors
		1. Identify employees who perform work-related tasks that require the use of hearing protection
		2. Notify EH&S when an employee is hired into a work-related task that requires the use of hearing protection
		3. Notify EH&S when a change in the workplace occurs that may change the noise exposure level
		4. Notify EH&S when an employee who is a participant in the Hearing Conservation Program is no longer an active employee at the University, or switches work-related tasks and no longer needs to be in the program
		5. Purchase appropriate hearing protection devices as recommended by the EH&S
		6. Ensure that the supply of hearing protection devices is maintained and available to employees
		7. Require employees to wear hearing protection devices when completing work-related tasks that require such use
		8. Ensure that employees properly use and care for hearing protection devices
		9. Ensure that noise-hazardous areas and equipment are properly labeled or posted
		10. Notify EH&S when an employee violates the requirements of the Hearing Conservation Program and the violation warrants a citation
		11. Allow employees to voluntarily use approved hearing protection
	4. Employees
		1. Wear hearing protection devices when performing work-related tasks that require such use
		2. Inform his/her supervisor of any health concerns that could be irritated by the use of hearing protection devices
		3. Schedule and attend required audiometric testing
		4. Attend required hearing conservation training programs
		5. Report noise hazards and hearing protection device concerns to his/her supervisor
		6. Contact Longwood University Speech, Hearing, and Learning Services (SHLS) to schedule a Longwood University Hearing Conservation audiogram at (434) 395-\_\_\_\_ and arrive 15 minutes prior to the schedule appointment time
	5. Longwood University Speech, Hearing, and Learning Services as part of a Memorandum of Understanding has agreed to:
		1. Schedule and conduct baseline and annual audiometric testing and audiometric evaluations by a certified and licensed audiologist for all Longwood employees in the Hearing Conservation Program
		2. Ensure all audiometric testing requirements as outlined in VOSH standard 1910.95 are met including:
			1. Audiometric testing instruments
			2. Audiometric testing rooms
			3. Audiometric calibrations
		3. Maintain records of calibrations for all audiometric testing equipment
		4. Identify any work-related Standard Threshold Shifts and communicate them to EH&S
		5. Charge for the actual services performed at normal approved rates using the University account number provided by EH&S
2. Program Components
	1. Noise Monitoring

The program requires EH&S to survey noise levels in order to identify which work-related tasks expose employees to noise at or above the Action Level. EH&S will then determine which employees perform these tasks. When an employee has been determined as performing these tasks, they will be admitted into the program and both the supervisor and employee will be notified. Additional monitoring will take place in the event that there is a change within the work environment that increases the sound levels to which employees may be exposed in order to ensure that newly eligible employees are included in the program.

* + 1. Surveyor

The surveyor completing noise monitoring is the Hearing Conservation Program Coordinator from the Environmental Health and Safety office.

* + 1. Method of survey

The equipment used to survey is the NoiseProTM Personal Noise Dosimeter produced by Quest Technologies, a 3M company. According to the NoiseProTM User Manual, the NoiseProTM is a noise-monitoring device that measures sound pressure levels in air and provides personal noise exposure measurements or area noise levels. The NoiseProTM records data using any or all of the features of the device based on user selection. The data collected from each noise monitoring session for work-related tasks or areas will be kept using the Noise Dosimetry Data Sheet in Appendix J. There will be one Noise Dosimetry Data Sheet per task or area that is monitored.

* + 1. Results

The results of noise monitoring will identify work-related tasks or areas on campus that expose employees to sound levels equal to or exceeding the 8-hour TWA of 85dB. The list of tasks and areas can be found on Appendix I: Noise Exposure Measurements. The HCPC will inform supervisors of noise monitoring results using the Noise Monitoring Results Letter in Appendix K.

* 1. Hearing Protection

The program requires employees to wear hearing protection if they meet either of the following criteria:

* They are exposed at or above the Action Level of 85dBA over an 8-hour TWA and they have not had a baseline audiogram conducted.
* They experience a work related standard threshold shift, which indicates that they are susceptible to noise-induced hearing loss.

The program requires supervisors to provide required hearing protection devices at no cost to the employees. Supervisors may note that the Noise Reduction Rating (NRR) on hearing protective equipment represents how well the protection device can reduce noise. Employees must be allowed to choose between at least one hearing plug and one hearing muff so that they can choose based on personal comfort. The hearing protection device provided to the employee must reduce the exposure level to 85dB or lower. The supervisor must require and fit employees who have experienced a standard threshold shift with hearing protection that meets the previously listed standards. EH&S will provide supervisors with pre-selected hearing protective equipment options to ensure that the devices meet the standards previously listed.

* 1. Audiometric Testing

The program requires employees who are exposed to the Action Level of 85dBA over an 8-hour TWA to receive audiometric testing. Longwood University must make testing available at no cost to the employee. The program requires two types of testing- a baseline audiogram and an annual audiogram.

* + 1. Audiometric Testing Center and Evaluator

A certified Audiologist at Longwood University Speech, Hearing, and Learning Services (SHLS) shall conduct the testing and evaluation of results at 313 West 3rd Street. The employee should arrive 15 minutes prior to the scheduled time. All audiometric testing must be conducted in a room with controlled background noise levels and with calibrated audiometers that meet the American National Standard Institute’s specifications of SC-1969.

* + 1. Baseline Audiogram

From the initial exposure to the Action Level, the supervisor has 6 months to send the employee for a baseline audiogram. For accuracy, the employee should not be exposed to noise at the Action Level within 14 hours prior to the baseline test. If work cannot be avoided, the employee should wear approved hearing protection while working within the 14-hour period.

* + 1. Annual Audiogram

An annual audiogram must be conducted within one year from the baseline audiogram. The annual audiogram is then compared to the baseline audiogram. The annual audiogram will determine if the employee has experienced a standard threshold shift since the baseline audiogram.

1. Standard Threshold Shift (STS)

A Standard Threshold Shift (STS) can occur in either ear and is an average shift of 10dB or more tested at 2,000, 3,000, and 4,000 hertz (Hz). If the results determine the employee has experienced a STS, Longwood University must inform the employee within 21 days of the results using the Standard Threshold Shift Notification Letter in Appendix C. The employee may obtain a retest within 31 days of receiving their results in order to determine if their STS has improved. If the STS does not persist in continued audiometric testing or the audiologist determines it is not a result of work-related tasks, the employee can discontinue their use of hearing protection so long as they are no longer exposed to noise at the Action Level while completing work-related tasks. If the evaluator determines that a Standard Threshold Shift (STS) is the result of medical pathology rather than work-related tasks or that he medical pathology is the result of wearing protection devices provided by the supervisor, the employee should be referred to their primary care physician for further evaluation.

1. Records

All employee audiometric test records will be kept at SHLS. Audiometric test records include:

* + - 1. The employee’s name
			2. The examination date
			3. The examiner’s name
			4. The date of most recent acoustic or exhaustive calibration
			5. The measurements of background sound pressure levels in testing rooms

All other details regarding the employee and the details of their employment shall be kept at the Environmental Health and Safety Office. Those records must include:

1. The employee’s name
2. The employee’s job classification
3. The employee’s most recent noise exposure assessment

Every 10 years, the Hearing Conservation Program Coordinator will perform an evaluation of employee records. This evaluation will identify any records that no longer need to be maintained on a case-by-case basis, as well as ensure that all records contain the required information and are up-to-date.

* 1. Employee Training

The program requires the Hearing Conservation Program Coordinator to train employees in the program once per year. The training should include:

* Effects of dangerous noise exposure
* The purpose of hearing protection
* The advantages and disadvantages of different types of hearing protection
* Fitting hearing protection devices
* Caring for hearing protection devices
* The purpose of audiometric testing
* The procedures of audiometric testing

The following materials should be made available to employees at training:

* A copy of the VOSH/OSHA Noise Standard 1910.95
* A handout of information on the Hearing Conservation Program
* A handout of information on hearing protection devices

At each training session, the trainer will keep record of employees in attendance using employee ID numbers. This shall be done using the Hearing Conservation Training Record form found in Appendix L.

1. Program Evaluation

The Environmental Health and Safety Director will evaluate the program annually using the Hearing Conservation Program Evaluation Checklist as provided in Appendix F. Edits and updates should be made to the program following the evaluation.

**Definitions and Acronyms**

**Action Level:** The noise level of 85dBA, as measured over an 8-hour Time Weighted Average, which triggers participation in the Hearing Conservation Program when reached or exceeded.

**Annual Audiogram:** An audiogram conducted once per year to be compared to the baseline audiogram in order to identify a Standard Threshold Shift.

**Audiogram Testing:** Exams that measure the sensitivity of a person’s hearing threshold in decibels as a function of frequency.

**Audiologist:** A licensed professional who specializes in the study and rehabilitation of hearing who is certified by the American Speech-Language-Hearing Association.

**Audiometer:** An instrument for conducting audiograms to measure the sensitivity of hearing.

**A-Weighted Sound Level (dBA):** The scale used for most occupational noise measurements, which contains weighted sound levels approximating the range of hearing of the human ear by reducing the effects of lower and higher frequencies in comparison to medium frequencies.

**Baseline Audiogram:** An audiogram against which following audiograms are compared to identify a Standard Threshold Shift.

**Decibels (dB):** A measure of the intensity of a sound level in terms of loudness using a logarithmic scale, meaning 90dB is 10 times louder than 80dB.

**Dosimeter:** An instrument that measures sound levels over a specified interval, stores the measurements, calculates the sound as a function of sound level and duration, and describes the results in terms of dose and time-weighted average.

**Frequency:** A sound’s pitch as measured in hertz (Hz).

**Hearing Protection Devices:** Personal Protective equipment that is intended to reduce the sound level reaching the eardrum by being placed in the ear canal or over the ear.

**Hertz (Hz):** A unit of measure for frequency expressed as cycles per second.

**Noise Induced Hearing Loss:** A type of hearing loss characterized by damage to the inner ear that can be attributed to noise.

**Noise Reduction Rating (NRR):** A rating method, which is placed on the outside of Hearing Protection Device packaging in order to describe a device based on how much the device reduces the overall noise level.

**Permissible Exposure Limit (PEL):** OSHA has designated this number as the value that must not be exceeded during any 8-hour work shift over a 40-hour workweek. This number is currently 90dBA 8-hr TWA.

**Sound:** A vibration or pressure oscillation that is detectable by the eardrum.

**Sound Level Meter:** An instant reading device used to measures noise in sound level surveys, which produces a reading in dBA of the results.

**Standard Threshold Shift (STS):** A change in a hearing threshold as compared to a baseline audiogram that occurs as an average of 10dB or more at 2,000, 3,000, and 3,000 Hz in either ear.

**Time Weighted Average (TWA):** That sound level, which if constant over an 8-hour exposure, would result in the same noise dose as is measured.

**Memorandum of Understanding**

**Between**

**Environmental Health and Safety Department**

**And**

**Longwood University Speech, Hearing, and Learning Services**

**Effective Dates**:

**Subject**: Memorandum of Understanding regarding the Hearing Conservation Program

**Purpose**: This Memorandum of Understanding (MOU) is established in order to set the terms and understanding between the Environmental Health and Safety (EH&S) Department and the Longwood University Speech Hearing and Learning Services (SHLS) regarding SHLS responsibilities in meeting the requirements of Longwood University’s Hearing Conservation Program as outlined by the Virginia Occupational Safety and Health (VOSH) standard 1910.95.

**Background**: EH&S serves to uphold the occupational standards set forth by VOSH in order to create the best possible environment for University employees in terms of health and safety. In order to have an effective Hearing Conservation Program, employees must wear approved hearing protection devices as well as obtain baseline and annual audiograms in the event that they complete work-related tasks that expose them to a noise level of 85dBA over an 8-hour Time Weighted Average (TWA), which is referred to as the Action Level. A certified and licensed audiologist shall complete the baseline and annual audiograms, as well as all evaluations/interpretations. SHLS is a University clinic, and as such is the ideal partner to have for the audiometric testing component of this program.

**Responsibilities**: The goal of the audiometric testing component of the Hearing Conservation Program is to align with the guidelines outlined in VOSH standard 1910.95.

In accordance with these guidelines SHLS agrees to:

* Schedule and conduct baseline and annual audiometric testing and audiometric evaluations by a certified and licensed audiologist for all Longwood employees in the Hearing Conservation Program
* Ensure all audiometric testing requirements as outlined in VOSH standard 1910.95 are met including:
	+ Audiometric testing instruments
	+ Audiometric testing rooms
	+ Audiometric calibrations
* Maintain records of calibrations for all audiometric testing equipment
* Identify any work-related Standard Threshold Shifts and communicate them to EH&S

In accordance with these guidelines EH&S agrees to:

**Reporting**: The EH&S Director will evaluate the hearing conservation program as part of the annual renewal process. The evaluation will report the effectiveness of and adherence to the responsibilities set forth in this agreement. The SHLS Clinical Audiologist will provide the EH&S Director with all results as required by VOSH.

**Funding**: SHLS will charge for services as follows:

* $30 for hearing screenings
* $25 for interpretation, adhering to OSHA requirements

SHLS will initiate an invoice for services on a monthly basis, detailing the budget code to which payment should be made, and forward to the EH&S Director for approval and payment.

**Duration**: This MOU shall become effective upon signature of the authorized officials from each partnering department. This MOU may be modified by mutual consent between the authorized officials. The MOU ends each year on July 1, but may be renewed by mutual consent. If either party wishes to terminate the agreement prior to the renewal date, written notice must be provided at least 6 weeks prior to their proposed termination date.

**Confidentiality**: In order to ensure the privacy and safety of all employees, all partners agree to adhere to the confidentiality expectations set forth by The Health Insurance Portability and Accountability Act (HIPAA). SHLS will secure clients’ release of information prior to sharing information.

All undersigned authorized officials have read and hereby agree upon the above terms.

Environmental Health and Safety Department

Michael Lonon

Environmental Health and Safety Director

\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Signature Printed Name Date

Longwood University Speech, Hearing, and Learning Services

Lissa Power-deFur, Ph.D., CCC-SLP

Speech, Hearing, and Learning Services Director

\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Signature Printed Name Date

Mani Aguilar, Au.D., CCC-A

Speech, Hearing, and Learning Services Clinical Audiologist

\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Signature Printed Name Date

To: [employee name and address]

From: [HCP director]

Date: [current date]

Subject: Standard Threshold Shift

Dear [employee],

 Your most recent audiometric test result was compared to your baseline audiogram. The comparison indicates a “standard threshold shift”, meaning you have suffered a hearing loss of an average of 10 decibels in either ear at the frequencies of 2000, 3000, and 4,0000 Hertz. An audiogram is not designed to determine the cause of a hearing loss, but there are many possible reasons a standard threshold shift may occur. However, your work-related tasks require you to work in areas where you are exposed to dangerous noise levels, as defined by the Virginia Occupation Health and Safety (VOSH).

 VOSH requirements are set in place for employee protection, and currently our department is responsible for ensuring that all requirements are met. Our goal is to protect you, so by taking action now, we can attempt to prevent your hearing loss from getting worse. We will be fitting you with hearing protectors at no cost, which you will be required to wear while completing work-related tasks in an environment that exposes you to a noise level of 85 decibels over an 8 hour Time weighted Average. Please see your supervisor to select hearing protection for your choice of comfort.

 The Environmental Health and Safety Department will attempt to answer any questions your may have regarding the Hearing Conservation Program requirements. If you have any questions regarding your audiometric testing results, please contract Dr. Aguilar at the Longwood Speech, Hearing, and Learning Services at \_\_\_\_\_\_\_\_\_\_\_\_\_\_.

Sincerely,

\*The Noise Comparison Chart provides the loudness in decibels (dB) of common noises so that the loudness of sounds may be compared.

**Noise Comparison Chart**

|  |  |
| --- | --- |
| Sound | Loudness in decibels (dB) |
| Weakest sound heard by the human ear | 0 dB |
| Rustling Leaves | 20dB |
| Whisper | 30 dB |
| Conversational Speech | 60dB |
| Shower  | 70dB |
| Alarm clock | 80dB |
| \*The sounds below are considered to be at dangerous noise levels and could result in a noise-induced hearing loss depending upon the duration of exposure. If employees were to be exposed to the following sounds for a duration greater than the permissible exposure time, admission into the Hearing Conservation Program would be required. |
| Passing diesel truck or snow blower | 85dB |
| Train whistle at 500ft. or Arc welder | 90dB |
| Jackhammer at 50ft. or belt sander | 95dB |
| Hand Drill | 100dB |
| Power Mower at 3ft. or table saw | 107dB |
| Power saw at 3ft. | 110dB |
| Sandblasting or emergency vehicle siren | 115dB |
| Jet engine at takeoff at 25 meters | 140dB |
| Firecracker | 145dB |
| Shotgun | 160dB (eardrum rupture) |

|  |  |
| --- | --- |
| Sound level, L (dBA) | Duration per Day, T (Hours) |
| 80 | 32 |
| 81 | 27.9 |
| 82 | 24.3 |
| 83 | 21.1 |
| 84 | 18.4 |
| 85 | 16 |
| 86 | 13.9 |
| 87 | 12.1 |
| 88 | 10.6 |
| 89 | 9.2 |
| 90 | 8 |
| 91 | 7 |
| 92 | 6.1 |
| 93 | 5.3 |
| 94 | 4.6 |
| 95 | 4 |
| 96 | 3.5 |
| 97 | 3.0 |
| 98 | 2.6 |
| 99 | 2.3 |
| 100 | 2 |
| 101 | 1.7 |
| 102 | 1.5 |
| 103 | 1.3 |
| 104 | 1.1 |
| 105 | 1 |
| 106 | 0.87 |
| 107 | 0.76 |
| 108 | 0.66 |
| 109 | 0.57 |
| 110 | 0.5 |
| 111 | 0.44 |
| 112 | 0.38 |
| 112 | 0.33 |
| 114 | 0.29 |
| 115 | 0.25 |
| 116 | 0.22 |
| 117 | 0.19 |
| 118 | 0.16 |
| 119 | 0.14 |
| 120 | 0.125 |
| 121 | 0.11 |
| 122 | 0.095 |
| 123 | 0.082 |
| 124 | 0.072 |
| 125 | 0.063 |
| 126 | 0.054 |
| 127 | 0.047 |
| 128 | 0.041 |
| 129 | 0.036 |
| 130 | 0.031 |

**Permissible Noise Level Chart**

For constant exposure levels not included in the table, you may calculate the permissible duration by using the following equation:

T= \_\_\_\_8\_\_\_

 2(L-90)/5

Where T = Allowable Exposure Duration and L = measured A-weighted sound level. Although at 85dBA a exposure duration of 16 hours is permissible, OSHA requires employees to be admitted into the Hearing Conservation Program when they are exposed to 50% of the permissible duration time during any work-related task.

To calculate the permissible dose of a particular sound level use the following equation:

D= 100x(C/T)

Where D= noise nose, C=total length of the workday in hours, and T=the reference duration for that level of noise as provided in the table.

To calculate the total noise dose when there are multiple sound levels that occur in different durations during the workday, use the following equation:

D= 100x(C1/T1+C2/T2+…Cn/Tn)

Where D refers to dose, Cn refers to the total duration of exposure at a particular noise level, and Tn refers to the reference duration for that level as provided in the table.

**Hearing Conservation Program Evaluation Checklist**

**Noise Monitoring**

|  |  |
| --- | --- |
|  | Noise exposure level monitoring has been completed in all areas and rechecked as necessary following any alterations that could result in a change in noise level. |

**Training**

|  |  |
| --- | --- |
|  | All employees included in the Hearing Conservation Program have received initial and annual training in the use of hearing protection, the effects of noise on hearing, and the purpose of the program, as required at this time. |
|  | All employees included in the Hearing Conservation Program have received supplemental training material such as handouts, online webpages, etc. |

**Hearing Protection**

|  |  |
| --- | --- |
|  | All employees included in the hearing conservation program have been provided with hearing protection. |
|  | All employees who are required to wear hearing protection are wearing them correctly. |
|  | All employees who have been identified as experiencing a Standard Threshold Shift have been fitted with hearing protection. |
|  | Disciplinary actions are enforced when employees repeatedly refuse to wear hearing protection devices. |

**Audiometric Testing**

|  |  |
| --- | --- |
|  | Baseline audiograms have been completed on all employees newly identified as completing a work-related task that exposes them to an 8 hour Time Weighted Average of 85dB or greater. |
|  | Annual audiograms have been completed on all employees who are included in the hearing conservation program and required to have an annual audiogram completed at this time. |
|  | All employees who have been identified as experiencing a Standard Threshold Shift have been notified. |
|  | Audiometric testing records are complete and maintained to meet the standards as outlined in the program. |

Completed by: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Date: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Will retrieve from Dr. Aguilar

To: [Audiologist]

From: [Hearing Conservation Program Coordinator]

Date: [current date]

Subject: Removal of Employee from the Hearing Conservation Program

Please remove [employee] from the list of employees requiring annual audiometric testing. Mr./Ms. [employee] no longer completes work-related tasks that expose him/her to the 85dB over an 8-hour TWA Action Level as outlined in the VOSH standard 1910.95. If you have any questions please contact me at \_\_\_\_\_\_\_\_.

Sincerely,

**Noise Exposure Measurements**

Most recent update completed by: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Most recent update completed on: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

|  |  |  |
| --- | --- | --- |
| Location/Area | Task/Process | Noise Exposure Level |
|  |  |  |
|  |  |  |
|  |  |  |
|  |  |  |
|  |  |  |
|  |  |  |
|  |  |  |
|  |  |  |
|  |  |  |
|  |  |  |
|  |  |  |
|  |  |  |
|  |  |  |
|  |  |  |
|  |  |  |
|  |  |  |
|  |  |  |
|  |  |  |
|  |  |  |
|  |  |  |
|  |  |  |
|  |  |  |
|  |  |  |
|  |  |  |
|  |  |  |
|  |  |  |
|  |  |  |
|  |  |  |

**Noise Dosimetry Data Sheet**

Name: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Date: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Job Title: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Dosimeter Manufacturer: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Model & Serial #: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Work Location Description: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Microphone Location: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Monitoring Conducted: \_\_ Personal \_\_ Area

Are Hearing Protectors Used? \_\_ Yes \_\_ No

If yes, what percent of the workday? \_\_\_\_\_\_\_\_\_\_

Threshold: \_\_\_\_\_\_\_\_\_\_\_\_

Criterion Level: \_\_\_\_\_\_\_\_

Exchange Rate: \_\_\_\_\_\_\_\_

Exposure description: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Calibration Check

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Date | Initial Reading | Time | Final Reading | Time |
|  |  |  |  |  |
|  |  |  |  |  |
|  |  |  |  |  |
| Calibrator: |

Dosimetry Data

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| Date | 115 dBA Exceeded | Start Time | Stop Time | Display Reading % | L eq(t) |
|  |  |  |  |  |  |
|  |  |  |  |  |  |
|  |  |  |  |  |  |

Reason for monitoring: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Were there any experimental errors that could have occurred that may have affected the data? \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Does the individual currently wear hearing protection? If so, what type, manufacture, and NRR? \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

MEMORANDUM

To:

From:

Date:

Subject: Noise Monitoring Results

The information provided in the table below summarizes the sound level data collected during noise monitoring. In accordance with the Virginia Occupational Safety and Health (VOSH) standard 1910.95, the requirement for providing hearing protection devices is triggered when the exposure level is 85dBA (decibels A-weighted) for a period of 8 hours or more, which is referred to as the action level. Audiometric testing is also required when this limit is reached or exceeded. If the sound level is equal to or greater than 90 dBA in an 8 hour time period, the use of hearing protection devices becomes mandatory. The standards, as outline by VOSH, were designed to protect employees from the damaging affects of noise exposure on hearing. At this time, there is no policy regarding sound levels below the VOSH standard of 85dBA over an 8 hour time period. Please notify EH&S of any employees who work in areas or perform tasks that expose them to noise levels at or above the action level so that our office can take the necessary steps to admitting those employees into the program. If you have any questions, please contact our office at \_\_\_\_\_\_\_\_\_\_\_.

Noise Survey Summary

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| Sample # | Date | Task/Location | dBA8-Hour Average | OSHA Allowed 8-Hour Average | % Dose(8-Hour Equivalent) | OSHA Allowed Dose |
|  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |
| Notes: |

**Hearing Conservation Training Record**

Training completed by: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Date: \_\_\_\_\_\_\_\_\_\_\_\_

|  |  |  |
| --- | --- | --- |
| Name of Employee | Job Classification | Department |
|  |  |  |
|  |  |  |
|  |  |  |
|  |  |  |
|  |  |  |
|  |  |  |
|  |  |  |
|  |  |  |
|  |  |  |
|  |  |  |
|  |  |  |
|  |  |  |
|  |  |  |
|  |  |  |
|  |  |  |
|  |  |  |
|  |  |  |
|  |  |  |
|  |  |  |
|  |  |  |
|  |  |  |
|  |  |  |
|  |  |  |
|  |  |  |
|  |  |  |
|  |  |  |
|  |  |  |
|  |  |  |

Additional Resources

**OSHA Occupational Noise Exposure Standard and Appendices**

<https://www.osha.gov/pls/oshaweb/owadisp.show_document?p_table=STANDARDS&p_id=9735>