

**SUNY OSWEGO FACILITIES SERVICES
ENVIRONMENTAL HEALTH & SAFETY**

HEARING CONSERVATION PROGRAM

Program Number	Original Effective Date	Revision Number-Date
EHS-HCP-2014	2007	12/01/2014

- 1.0 **Purpose**
- 2.0 **Scope**
- 3.0 **Applicability**
- 4.0 **Regulatory Requirements**
- 5.0 **Definitions**
- 6.0 **Responsibilities**
- 7.0 **Procedures/Implementation**
- 8.0 **Training**
- 9.0 **Record Keeping**
- 10.0 **References/Definitions**
- 11.0 **Appendices/Forms**

1.0 **Purpose**

The purpose of this program is to define SUNY Oswego requirements regarding noise exposure in the workplace. These requirements, which are based on the Occupational Safety & Health Administration (OSHA) standard ***Occupational Noise Exposure*** [29 CFR 1910.95](#) are designed to protect employees from hearing loss which could result from exposure to high levels of workplace noise. The OSHA standard requires employers to implement a Hearing Conservation Program whenever employees are exposed to occupational noise levels at or above the OSHA action level (an 8-hour time-weighted average of 85 dBA). In compliance with the OSHA standard, this program incorporates a Hearing Conservation Program with a primary objective of maintaining University work environments free from noise hazards that could lead to noise-induced hearing loss. This program will include exposure monitoring, audiometric testing, use of hearing protection and employee training.

2.0 **Scope**

This program will include all SUNY Oswego employees whose duties require them to work at operations, either stationary or mobile, where employees are expected to be exposed to noise levels of 85dBA ≤ 90dBA or above for 8 hours as a time weighted average. All employees who are exposed to workplace noise at or above the OSHA action level (an 8-hour time-weighted average of 85dBA) must be included in the Hearing Conservation Program. If the time-weighted average were to exceed 90dBA, a Hearing Protection Program would be required. At this time there are no employees required to be in a Hearing Protection Program.

3.0 **Applicability**

Evidence is well established that worker exposure to noise of sufficient intensity and duration can result in permanent hearing damage. Noise-induced hearing loss rarely results from a single exposure; it can progress unnoticed over a period of years. Early noise-induced hearing loss occurs at the higher frequencies where the consonant portion of speech occurs, making communication difficult.

4.0 **Regulatory Requirements**

This program is required under Occupational Noise Exposure [29 CFR 1910.95](#) included as Appendix A of this program.

The Occupational Safety and Health Administration (OSHA) requires that employers:

1. Monitor facilities and employees to determine noise overexposure situations.

2. Develop and implement a written Hearing Conservation Program that identifies the methods used to comply with regulatory requirements.
3. Implement an audiometric testing program for employees with high noise exposures to determine if exposure impacts hearing ability.
4. Provide appropriate hearing protection to employees with high noise exposures if other methods of noise control are not feasible during the installation of such controls.
5. Provide annual training for employees with high noise exposure.
6. Maintain medical and monitoring records pertaining to the Hearing Conservation Program.

To meet these requirements, SUNY Oswego has established this *Hearing Conservation Program*.

5.0 **Definitions**

These definitions apply to the following terms as used in paragraphs (c) through (n) of 29 CFR 1910.95.

Action level - An 8-hour time-weighted average of 85 decibels measured on the A-scale, slow response, or equivalently, a dose of fifty percent.

Audiogram - A chart, graph, or table resulting from an audiometric test showing an individual's hearing threshold levels as a function of frequency.

Audiologist - A professional, specializing in the study and rehabilitation of hearing, who is certified by the American Speech-Language-Hearing Association or licensed by a state board of examiners.

Baseline audiogram - The audiogram against which future audiograms are compared.

Criterion sound level - A sound level of 90 decibels.

Decibel (dB) - Unit of measurement of sound level.

Hertz (Hz) - Unit of measurement of frequency, numerically equal to cycles per second.

Medical pathology - A disorder or disease. For purposes of this regulation, a condition or disease affecting the ear, which should be treated by a physician specialist.

Noise dose - The ratio, expressed as a percentage, of (1) the time integral, over a stated time or event, of the 0.6 power of the measured SLOW exponential time-averaged, squared A-weighted sound pressure and (2) the product of the criterion duration (8 hours) and the 0.6 power of the squared sound pressure corresponding to the criterion sound level (90 dB).

Noise dosimeter - An instrument that integrates a function of sound pressure over a period of time in such a manner that it directly indicates a noise dose.

Otolaryngologist - A physician specializing in diagnosis and treatment of disorders of the ear, nose and throat.

Representative exposure - Measurements of an employee's noise dose or 8-hour time-weighted average sound level that the employers deem to be representative of the exposures of other employees in the workplace.

Sound level - Ten times the common logarithm of the ratio of the square of the measured A-weighted sound pressure to the square of the standard reference pressure of 20 micropascals. Unit: decibels (dB). For use with this regulation, SLOW time response, in accordance with ANSI S1.4-1971 (R1976), is required.

Sound level meter - An instrument for the measurement of sound level.

Time-weighted average sound level - That sound level, which if constant over an 8-hour exposure, would result in the same noise dose as is measured.

6.0 Responsibilities

The Environmental Health and Safety Department will have overall responsibility of the program to ensure that: employees receive adequate training and information, that annual requirements are met, the procedures of this program are being followed and that the program is evaluated at least every three years. The Facilities Maintenance Operations Department will have the responsibility to insure that respective shops are complying with this program.

For this program to be effective various divisions and departments in Facilities Services will have responsibilities as follows:

1. ENVIRONMENTAL HEALTH AND SAFETY (EH&S)

- a. Having a working knowledge of 29 CFR 1910.95 in order to provide guidance and direction for compliance with the Occupational Noise Exposure Standard

- b. Arranges for Audiometric Testing through a Licensed Health Care Professional (LHCP) – currently Oswego Health – Occupational Health Services
- c. Arranges for any follow up appointments requested by the LHCP
- d. Maintain records of all employees who have been trained under this program
- e. Establish a written Hearing Conservation Program
- f. Issue guidelines for and updates to the program
- g. Recommend appropriate hearing protection devices
- h. Provide training on the proper use and care of hearing protection
- i. Conduct periodic noise assessment surveys
- j. Perform periodic reviews of the program (last date of review 11/16/16)
- k. Will not keep, review or require any medical information other than the letter from the LHCP that informs us of whether the employees audiogram has normal results – the ability to wear hearing protection will be based on the recommendation of the LHCP or an individual's physician.
- l. In the event EHS is notified by the LHCP that an employee cannot wear hearing protection based on their evaluation and audiogram, notification will be sent to the Facilities Maintenance and Operations Director and Human Resources who will determine the best course of action for the employee.

**2. FACILITIES MAINTENANCE AND OPERATIONS DEPARTMENT
DIRECTOR AND ASSOCIATE DIRECTORS AND MANAGERS**

- a. Ensure adequate funding is available to purchase and maintain equipment needed under this program
- b. Overseeing responsibilities assigned under this program to respective Shop Supervisors.
- c. Consider noise levels of machines and equipment prior to purchase.
- d. Include hearing conservation requirements into position descriptions for positions, which may require the use of hearing protection.
- e. In the event that an employee cannot wear hearing protection as per written notification from the LHCP, a meeting with Human Resources will take place to discuss the best course of action for the employee.

3. SHOP SUPERVISORS

- a. Purchase and make available selected hearing protection devices.
- b. Being aware of tasks requiring the use of hearing protection.
- c. Enforcing the proper use of hearing protection when necessary.
- d. Ensure re-useable hearing protection is properly cleaned, maintained and stored.

- e. Monitoring work areas and operations to identify noise hazards.
- f. Ensure that staff under their supervision that are in the Hearing Conservation Program attends annual training.
- g. Ensure that staff under their supervision that are in the Hearing Conservation Program participate in the required medical evaluations (audiometric testing).
- h. Notify Environmental Health and Safety of any new staff so that a baseline audiogram can be scheduled within the first 6 months of assignment.
- i. Consider noise levels of machines and equipment prior to purchase.
- j. Notify EHS when new procedures are implemented or new equipment is utilized that may affect an employee's noise exposure.

4. EMPLOYEES in the HEARING CONSERVATION PROGRAM

- a. Will use hearing protection under conditions specified by this program, and in accord with the instruction and training they receive.
- b. Wear and maintain hearing protection devices as instructed.
- c. Participate in Annual Training.
- d. Clean, disinfect, and properly store non-disposable hearing protection such as ear muffs assigned for personal use.
- e. Use only those brands/types of hearing protection devices which are appropriate for the noise exposure, and for which the employees have been trained and fitted.
- f. Report to their supervisor any changing conditions that may impact employee noise exposures.
- g. Report for Medical Evaluations – Annual Audiogram.
- h. Notify their Shop Supervisor if they need additional equipment.
- i. Use hearing protection correctly – as shown in training.

5. HUMAN RESOURCES DEPARTMENT

- a. Maintain records of all medical records in employee personnel files.
- b. Allow employees access to their medical and exposure records as required under 29CFR1910.1020.
- c. Write hearing conservation requirements into position descriptions for positions, which may require the use of hearing protection.
- d. In the event that an employee cannot wear hearing protection as per written notification from the LHCP, a meeting with the Facilities Maintenance Operations Department Director will take place to discuss the best course of action for the employee.

7.0 Procedures/Implementation

The procedures outlined throughout this program will be used in order implement an effective Hearing Conservation Program. Although SUNY Oswego encourages the use of hearing protection by any employee who so desires to use it, the only shops covered under the Hearing Conservation Program at this time are the Garage and the Grounds. Any Shop Supervisor or employee who feels that the equipment they are working with exceeds allowable limits can ask for a noise survey to be conducted by the EHS Department. The EHS Department will periodically conduct noise surveys to ensure compliance with 29 CFR 1910.95.

8.0 Training

Employees that are in the Hearing Conservation Program (those employees exposed to noise levels $85\text{dBA} \leq 90\text{dBA}$) are required to attend training annually.

1. Topics to be covered include:
 - a. SUNY Oswego Hearing Conservation Program.
 - b. The effects of noise.
 - c. The purpose of hearing protectors, the advantages, disadvantages and attenuation of various types of hearing protection.
 - d. Instructions on the selection, fitting, use and care of hearing protection.
 - e. The purpose of audiometric testing, and the explanation of the test procedures.
 - f. The equipment, tasks or areas in which noise is above 85dBA.

9.0 Record Keeping

1. **Environmental Health and Safety**
 - a. Maintain annual training records.
 - b. Maintain letter from the LHCP.
 - c. Records will be kept for a minimum of 3 years.
 - d. Maintain records of any noise surveys or area monitoring until updated ones are taken.
2. **Human Resources**
 - a. Maintain any Personal Dosimetry records for employees.
 - b. Maintain any letters from the LHCP that indicate an employee cannot wear hearing protection.

10.0 References/Definitions

1. [Occupational Noise Exposure- \(OSHA\) 29 CFR 1910.95](#)
2. Definitions can be found in Appendix I of [CFR 1910.95 Appendix I](#).

3. [Hearing Conservation Program - University of Maryland](#)

11.0 Appendices/Forms

1. [Occupational Noise Exposure- \(OSHA\) 29 CFR 1910.95](#)
2. Definitions can be found in Appendix I of [CFR 1910.95 Appendix I](#).

Occupational Noise Exposure-
(OSHA) 29 CFR 1910.95

Definitions
[CFR 1910.95 Appendix I.](#)