

EMPLOYEE HEARING CONSERVATION POGRAM

Revision 3

September 2001

I. Purpose

The State University of New York at Geneseo (SUNY Geneseo) is committed to providing a safe and healthful work environment for our faculty, staff and students. In pursuit of this endeavor, this written program has been developed to provide guidance for employee education and outline procedures to identify and eliminate or control to the extent possible, exposures to high sound levels. This Hearing Conservation Program has been prepared and implemented in accordance with 29 CFR §1910.95.

II. Applicability

OSHA regulations set a threshold of 85 decibels (dB) measured as an 8-hour time weighted average (8 hr TWA) as the action level above which mitigation measures must be implemented. While applicable to all employees of the State University of New York at Geneseo, it is only those employees experiencing occupational exposures to noise above the 85 dB 8 hr TWA for which the procedural requirements of this program apply.

III. Procedural Requirements

A. Sound Level Determinations

Sound level determinations will be conducted for employees conducting activities, or the noise levels of specific areas, with the potential of producing noise levels between 80 and 130 decibels. These activities may include, but are not limited to the following activities (sound levels approximated):

Small lawn mowers	90 dB	Indoor rock concerts	115 - 120 dB
Chain saw operations	110 dB	Power Tools	85 - 95 dB

These determinations will be repeated whenever a change in production, process, equipment or controls may result in an increase in the level of exposure.

B. OSHA Permissible Sound Levels

The following table presents the daily maximum noise exposures permitted by OSHA:

<u>Sound Level (dBA)</u>	<u>Duration per Day (hours)</u>
90	8
92	6
95	4
97	3
100	2
102	1.5
105	1
110	0.5
115	< 15 minutes

Exposure to impulsive or impact noise should not exceed 140 dB peak sound pressure level.

C. Employee Notification and Equipment Labeling

Employees who may be exposed to sound levels above the OSHA Action Level or the OSHA Permissible Levels will be notified of results of sound level monitoring. This may be accomplished by labeling specific pieces of equipment or specific areas with the decibel level produced during operation. Employees will also be notified of the time and place of any scheduled sound level monitoring to facilitate observation by employee representatives, if such observation is desired.

D. Audiometric Testing

A program of audiometric testing will be instituted for all employees exposed to sound levels above the OSHA Action Level or the OSHA Permissible Levels. The program will include a baseline and an annual audiogram. Employees will be notified of the scheduled date of their audiograms, and instructed to avoid noise exposures (occupational and non-occupational) for 24 hours prior.

Audiometric testing will be conducted by certified personnel and comply with all procedural and calibration requirements of 29 CFR §1910.95 and its appendices.

Results of annual audiograms will be compared to baseline audiogram results. A retest may be conducted within 30 days if results indicate a standard threshold shift has occurred (a 10 decibel change at 2000, 3000 and 4000 Hz). Employees demonstrating a standard threshold shift in the retest will be notified of the results within 21 days of the retest.

The following information will be retained with audiometric testing results:

1. Employee name and job title
2. Date of audiogram
3. Examiner's name
4. Equipment information including last calibration date
5. Sound level assessments associated with employee's responsibilities
6. Background levels in testing room

If it is determined that the standard threshold shift is the result of occupational noise exposure, employees

1. will be fit or refit for hearing protection (possibly with greater attenuation factors)
2. trained or retrained in use of hearing protection
3. REQUIRED to wear the specified hearing protection
4. possibly referred for additional testing if medical pathology if affecting use of hearing protection

V. Training

SUNY Geneseo Physical Plant employees and other employees exposed to occupational sound levels above the OSHA Action Level or the OSHA Permissible Levels will receive annual training in the SUNY Geneseo Hearing Conservation Program. This training will include current information on the following:

1. the effects of noise or sound levels on hearing
2. the function and limitations of hearing protection
3. care, fitting and selection of hearing protection
4. purpose of audiometric testing

III. Responsibilities

It is the responsibility of every SUNY Geneseo employee to notify supervisory personnel or the Department of Environmental Health and Safety (EHS) of equipment or a work location suspected of exceeding the OSHA thresholds.

Supervisory personnel ordering new equipment suspected of exceeding the OSHA thresholds should request the operating decibel range of the equipment from the manufacturer and, if necessary, ensure the equipment is labeled as requiring hearing protection prior to its use.

Sound level measurements will be performed by EHS or EHS will arrange to have such measurements conducted by PESH or other qualified individuals or contractors.

Employees operating equipment labeled as requiring hearing protection or in an area requiring hearing protection must wear appropriate hearing protection.

VI. Recordkeeping

Sound level measurements shall be maintained for a minimum of 2 years.

Audiometric test records shall be maintained in the Personnel Office Records for the duration of the particular employee's employment.

Nothing in this Program prevents an employee from wearing hearing protection for comfort reasons.

List of Campus Positions Identified as experiencing potential exceedance of OSHA levels:

Groundswoker:	small equipment operation (chainsaws, etc.)
Carpenter:	equipment operation (electrical saws, planers, etc.)
Rock Music Fire Watchers:	music
Heating Plant	work directly on boilers

Appendix A

Determining the Adequacy of Hearing Protection

The US Environmental Protection Agency developed the following mathematical determination of the adequacy of hearing protection. This Noise Reduction Rating (NRR) must be shown on the packaging of hearing protection.

$$SLwP = MSL - (NRR - 7)$$

1. Measure sound level (MSL)
2. Locate NRR of hearing protection (NRR)
3. Subtract 7 from the NRR (NRR - 7)
4. Subtract NRR - 7 from Measured Sound Level (MSL) - (NRR - 7) to indicate actual sound level while wearing hearing protection (SLwP)
5. If the SLwP is below the OSHA Action Level, the protection provided can be assumed to be adequate.

Example:

Equipment Measured Sound Level = 95 decibels

NRR of hearing protection = 25

$$SLwP = 95 - (25 - 7) = 77$$

This hearing protection would be considered adequate as 77 decibels is below the 85 decibel action level.