

NOISE AND HEARING CONSERVATION

Scope and Applicability

This procedure applies to facilities and field operations where personnel may encounter noise exposures that may exceed 85 db. The purpose of this procedure is to protect employees from hazardous noise exposures and to prevent hearing loss.

Implementation

Implementation of this program is the responsibility of Management.

Procedure

1.0 Requirements

A. General

1. Require the use of hearing protectors in any location where powered or motorized equipment or any other noise source could reasonably be expected to exceed 85 dBA.
2. Use of hearing protectors may only be discontinued when noise levels are verified to be less than 85 dBA through a properly conducted noise survey.

B. Hearing protectors

1. Require that at least three (3) types of hearing protectors are available to employees, preferably a plug and muff type.
2. Minimum Noise Reduction Ratings (NRR)
 - a) Hearing protectors issued to or used by personnel must have the following minimum NRR:
 - Ear plugs: 29dB
 - Muffs: 27dB
3. Require that hearing protectors are used properly and thus effectively protect hearing.
4. Hearing protection attenuation will be calculated using the OSHA Hearing Conservation procedures.
 - a) $\text{Actual NRR} = [\text{Rated NRR} - 7 \text{ dBA} / 2] = \text{ ______ } \text{ dBA}$

C. Noise surveys

1. Noise surveys must be conducted in a manner that reasonably reflects the exposure of the affected employees. Surveys must be conducted under the supervision of the Safety Manager.
2. Sound level meters and audio dosimeters used to determine employee exposure to noise sources must be Type II (accurate to within +/- 2dB), operated in "slow" response, on the "A" scale, and be calibrated to factory guidelines (including periodic factory re-calibration).
3. Samples must be taken with adequate duration to be representative of employees' exposures. Monitoring is to be done whenever new equipment or processes are introduced to the work area.

- D. Engineering and administrative controls
 - 1. Eliminate noise sources to the extent possible through engineering or administrative controls. Examples of controls that must be considered follow:
 - a) The rotation of people to lower exposed positions.
 - b) Addition or replacement of mufflers on motorized equipment
 - c) Addition of mufflers to air exhausts on pneumatic equipment
 - d) Following equipment maintenance procedures to lubricate dry bearings.
 - e) Isolation of loud equipment such as machinery, compressors, and generators from employee work areas
 - f) Replacement of older noisy equipment with newer and quieter models
- E. Audiometric exams
 - 1. Verify that permanent employees have an audiometric baseline test within 180 days of being assigned to a high noise area.
 - 2. Verify that permanent employees and project employees who are required to wear hearing protection for at least six months have had audiometric tests (annually).
- F. Training
 - 1. Verify that each employee who must work in a noisy environment is current on the required Hearing Conservation training.
 - 2. Training must include the following topics:
 - a) The effects of noise on hearing
 - b) The purpose of hearing protectors
 - c) The advantages and disadvantages of various types of hearing protectors
 - d) The attenuation of various types of hearing protection
 - e) The selection, fitting, care and use of hearing protectors
 - f) The purpose of audiometric testing
 - g) An explanation of the audiometric testing procedure
- G. Audit
 - 1. Annually, a program audit is to be performed for each site/ project to assure all of the above procedures are in place and effectively management.
 - 2. Reports are to be in writing and documented along with corrective actions.

2.0 Documentation Summary

- A. File these records in the Safety Filing System as a permanent record:
 - 1. Types of hearing protectors and associated NRRs
 - 2. Noise surveys, when applicable
 - 3. Hearing Conservation Program Medical Clearances
 - 4. Training records
 - 5. Audit reports and corrective action completion