

Industrial Noise and Hearing Conservation	S.O.P. 5D		Page 1 of 3
	10/01	Rev. 2	
	Review Date:		
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STANDARD OPERATING PROCEDURE		Approved by:	

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I. SCOPE AND PURPOSE

- a. The purpose of this procedure is to provide guidance in developing and implementing a Hearing Conservation Program for construction.
- b. This procedure applies to all personnel, including associated supervisors required to work in noisy environments and/or wear hearing protection devices.
- c. This procedure assumes personnel will be working in “Noisy Environments.”

II. RELATED PROCEDURES AND RESOURCES

- a. S.O.P. 3G, Personal Protective Equipment
- b. Personal Protective Equipment Field Training Module
- c. 29 CFR 1910.95 Occupational Noise Exposure
- d. 29 CFR 1926.52 Occupational Noise Exposure

III. DEFINITIONS

- a. **Decibel (dB)** – A unit of measurement of sound level.
- b. **Noise Reduction Rating (NRR)** - The number of decibels the hearing protective device will reduce the noise level.
- c. **Noisy Environment** - A subjective term used to describe work environments or locations where noise is present at levels high enough to prevent normal voice conversations between two individuals at a distance of 3 to 4 feet.
- d. **Permissible Exposure Limit (PEL)** - The allowable noise exposure for compliance with OSHA requirements.
- e. **Time-Weighted Average (TWA)** - The sound level averaged over an 8-hour exposure period.

IV. PERSONAL RESPONSIBILITY

- a. The Director of H.R./Safety shall be responsible
 - i. For the implementation of this S.O.P
 - ii. For the annual review and any modification in this S.O.P.
- b. The Project Manager is responsible for ensuring that all affected personnel comply with the Hearing Conservation Program.
- c. The Supervisor shall ensure that:
 - i. Engineering controls are implemented when feasible.
 - ii. Proper hearing protection devices are readily available.
 - iii. All personnel properly use hearing protection devices.
 - iv. All personnel working in hazardous noise areas are properly trained.
- d. Employees shall ensure that:
 - i. Hearing protection devices are utilized anytime a hard hat, safety glasses and safety-toed boots are required.
 - ii. Hearing protection devices are utilized properly.
- e. Subcontractors are responsible to provide appropriate hearing protection equipment for their personnel.

V. NOISE MONITORING

- a. For the purpose of this program BIST assumes all field personnel are or will be exposed at or above 85dB(A) when working in and around operating equipment, or process units and therefore fall under the Hearing Conservation Program.

VI. AUDIOMETRIC TESTING

- a. All new employees will be required to submit to audiometric testing upon initial hire and annually thereafter.
 - i. This establishes a valid baseline audiogram upon hire.
 - ii. Base line audiogram is used against subsequent yearly audiograms for comparison.
- b. At time of termination of employment with BIST, all field personnel will be required to take an exit audiogram unless they have been tested within the previous six (6) months.
- c. An exception to the requirement (VI)(a) above, would be exercised only if
 - i. The employee was terminated, quit or was part of a Reduction of Force, within the previous three (3) months, and
 - ii. Submitted to an exit audiometric test.
- d. The testing will 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.
- e. A technician who is not certified, but who operates microprocessor audiometers and is responsible to an audiologist or physician will also be acceptable.
- f. If the annual audiogram shows an employee has suffered a standard threshold shift, BIST may decide to have the employee re-tested in thirty (30) days and

- consider the results of the re-test as the annual audiogram.
- g. If after the annual audiogram the employee is confirmed to have a standard threshold shift the tested employee
 - i. Will be informed in writing within twenty-one (21) days of the determination.
 - ii. May be referred to an Otolaryngologist for further examinations to determine if the shift is from occupational noise exposure or from other illness or disorders, which could cause abnormalities in the hearing evaluation.

VII. HEARING PROTECTION

- a. The primary means of reducing noise levels is the use of engineering controls. However, when engineering controls are not feasible or cannot reduce levels to within the permissible limit, hearing protectors shall be worn.
- b. The Safety department, in concert with project management, will determine the following:
 - i. When and what type of hearing protective devices shall be used.
 - ii. The NRR of the hearing protective devices.
- c. These hearing protective devices shall be made available, without cost, to all employees.

VIII. TRAINING

- a. Hearing Protectors
 - i. All personnel included in the Hearing Conservation Program shall be properly trained as to the harmful effects of excessive noise and the methods of protecting against noise exposure. During New Employee orientation, each employee shall be trained in the use, care, and maintenance of the hearing protectors.
 - ii. Training will be repeated annually.
 - iii. Field Training Module, Personal Protective Equipment shall be utilized.
- b. Warning Signs
 - i. To alert employees, subcontractors, and casual visitors to the potential for hearing damage, warning signs will be posted where noise levels exceed 85 dBA.
 - ii. Anyone working inside these areas for more than 5 minutes is required to wear suitable hearing protection.

IX. RECORDKEEPING

- a. The H.R./Safety Department shall be responsible for all records pertaining to the Hearing Conservation Program.
- b. The types and duration of records kept will be per OSHA standard 29 CFR 1926.52.
- c. These records will be maintained at the corporate office, 402 Westchester Dr., Corpus Christi, Texas 78408.