Republic Indemnity

Company name here _____

HEARING CONSERVATION PROGRAM

Contents

Noise Exposure in the Workplace

Noise-induced hearing loss (NIHL) is one of the most common occupational diseases and the second most self-reported occupational disease or illness. Hearing loss is preventable but if it occurs, it is permanent and irreversible. We live in a noisy world today, and we need to take preventive measures to protect workers' hearing.

Hearing

Hearing is the only one of our senses that is mechanical. The senses of smell, taste, and sight involve chemical reactions but hearing is derived from physical movement. Most of the time we pick up the vibration of individual air molecules, but we can also acquire vibration through a solid such as earth or through a liquid, such as water.

The outer ear catches the vibrations, which continue on until they reach the organ of Corti. This organ contains thousands of tiny hairs that generate an electrical impulse that goes to the cerebral cortex where the brain interprets the sound.

The hair cells of the inner ear can be damaged by a one-time exposure to an intense sound, an explosion, or by a continuous loud sound that may occur in a woodworking or machine shop. Exposure to the harmful sound can also damage the auditory nerve.

Protection

The loudness of sound is measured in decibels using the A scale (i.e., dBA) of a sound level meter. Normal conversation is estimated at 60 dBA. City traffic can reach 85 dBA. Firecrackers, motorcycles, and small firearms can reach levels over 120 dBA. Prolonged or repeated exposure to sound levels exceeding 85 dBA can cause noise-induced hearing loss (NIHL).

Engineering controls are the most desirable method of controlling noise by designing and/or implementing methods of eliminating hazards or reducing exposure to hazards. While this approach is called engineering control, it does not necessarily mean that an engineer is required to design the control. The employer can implement many simple, low cost modifications including regular maintenance of equipment, substitution of machines or processes, isolation of the machine or the operator, moving employees away from noise-producing equipment, locating noisy machinery in an area away from workers, and placing rubber mountings on machinery to reduce vibration. Other more advanced solutions may require the assistance of an acoustical engineer.

The use of **administrative controls** is another effective method of reducing exposure to high noise levels. For instance, this would pertain to changes in production schedules, job rotation, or providing additional relief by lengthening rest or lunch breaks or other measures that reduce or limit exposure to high noise levels.

A combination of both engineering and administrative controls can also be used as long as the controls selected reduce noise exposures below an 8-hour time-weighted average (TWA) of 90 dBA.

When exposure to noise exposure hazards cannot be engineered completely out of normal operations or maintenance work, and when safe work practices and administrative controls cannot provide sufficient additional protection from exposure, **personal protective equipment** (PPE) may be required. This is the least desirable method for controlling the hazard because it does not address the hazard directly, and it will not protect a worker who does not use it properly, and it can fail to protect if there is a problem with the equipment itself.

Workers exposed to high noise levels must use appropriate hearing protection devices (HPDs) such as NIOSH-approved earplugs or ear muffs or both when engineering or administrative controls do not effectively reduce exposure. Employees must be provided with a selection of at least one type of earplug and one type of ear muff. Employees will determine, with the help of a person trained to fit hearing protectors, the size and type of HPD that is most suitable for the working environment and noise levels. The HPD selected should be comfortable to wear and offer sufficient protection to adequately protect workers from high noise levels.

Management Policy Statement

I. Purpose

It is the policy of _____ to protect its employees from the hazards of excessive noise exposure on the job. _____ has instituted a Hearing Conservation Program to protect its employees from excessive occupational exposure to noise.

The general objectives of this program are:

- To identify and enroll in the company's Hearing Conservation Program all employees who are regularly exposed to workplace noise equal to or exceeding an 8-hour time-weighted average (TWA) of 85 dBA.
- To identify and demarcate areas with high noise levels as well as workstations and equipment.
- To reduce workplace exposure to noise through engineering and/or administrative controls, or the use of hearing protection devices (HPDs).
- To assess and monitor annually the hearing acuity of *"exposed"* employees for the early detection of noise-induced hearing loss, and to take remedial action to avoid progressive hearing loss.
- To ensure that all *"exposed"* employees receive training about the effects of excess noise on human hearing and general health, and the importance and correct use of HPDs.

II. Policy and Procedures

A. Administration of Program

_____ is responsible for administering this program.

B. Use of Engineering Controls

Engineering and/or administrative controls will be used to reduce an employee's exposure to noise that equals or exceeds 90 dBA on an 8-hour time-weighted average. If such controls are not feasible or effective, employees will be provided with HPDs to reduce the employee's exposure to less than 90 dBA.

C. Employees Included

Employees exposed to noise levels equal to or exceeding an 8-hour TWA of 85 dBA will be included in the Hearing Conservation Program. HPDs will be provided and replaced as necessary at no cost to all employees in the Program. A current list of all employees enrolled in the Hearing Conservation Program will be maintained and updated quarterly.

D. Noise Monitoring

1. Noise measurements will be conducted when information indicates that any employee's exposure may equal or exceed an 8-hour TWA of 85 decibels measured on the A-scale (slow response) or, equivalently, a dose of 50 percent.

2. Measurement of noise levels will be repeated and the effectiveness of HPDs in use will be re-evaluated whenever a change in production processes, equipment, or controls is introduced into the facility.

3. Employer will notify each employee exposed at or above the action level (an 8-hour TWA of 85 dBA or more) of the results of monitoring.

4. The program administrator will maintain exposure and noise measurement records.

E. Signage of Areas and Equipment

1. The following notice or a similar one will be posted conspicuously in all areas with noise levels equal to or exceeding 90 dBA.

2. The following notice or similar will be conspicuously posted on or near stationary sources (whether owned or leased) producing noise levels equal to or exceeding 90 dBA.

3. Small, separate, and mobile sources producing noise levels equal to or exceeding 90 dBA, such as compressors, generators, pneumatic tools, weed trimmers, and circular saws, will be affixed with caution labels recommending that the operator(s) use hearing protection while operating the equipment. The sign or label will state "Hearing Protection Required While Equipment is Operating."

4. A current inventory of high noise areas and equipment will be maintained and updated at least annually.

F. Audiometric Testing

1. Audiometric testing will be available, at no cost, to all employees who are exposed to an action level of 85 dBA or above, measured as an 8-hour TWA. All audiometric testing (personal hearing test) will be performed by a certified auditory technician or a physician.

2. A baseline audiogram will be performed on each employee enrolled in the Hearing Conservation Program within 6 months of the employee's first exposure to noise exceeding a TWA of 85 dBA. Until the baseline audiogram is obtained, each employee will be required to wear an HPD to reduce noise exposure to less than 90 dBA.

3. Audiometric test results will be made available to employees within 6 months of an employee's first exposure at or above the action level (85 dBA).

4. Audiograms: At least annually after obtaining the baseline audiogram, a new audiogram will be obtained for each employee exposed at or above the action level. The results will be compared to the baseline audiogram to determine if a standard threshold shift (STS) has occurred, as defined by Section 5097(d)(8). An STS is defined as an average change in the hearing threshold of 10 dBA or more in either ear measured at 2000, 3000, and 4000 Hz.

5. If an STS occurs, the affected employee will be notified in writing within 21 days of the determination. The employee will be offered a choice of an approved HPD and trained in the use and care of the HPD. He or she will be required to wear HPD in order to reduce the the exposure to a maximum of 85 dBA.

6. The affected employee will be referred for further testing when test results are questionable or when related medical problems are suspected. If additional testing is necessary or if the testing indicates a medical pathology of the ear that is caused or aggravated by wearing hearing protectors, the employee will be referred for a clinical audiological evaluation or otological examination, as appropriate.

7. The program administrator will keep all audiogram records on file at least: 7 years after the date of an employee's termination of employment. Also, noise exposure measurement records shall be retained for 2 years.

G. Hearing Protection

1. Hearing protection will be worn:

   - By all employees exposed to noise levels equal to or exceeding an 8- hour TWA of 90 dBA.
   - By all employees operating equipment that produces noise equal to or exceeding 90 dBA.
   - By any employee for whom a baseline audiogram has not been established and who is assigned to work in areas where the noise level equals or exceeds 90 dBA.
   - By all employees and visitors entering areas where the noise level equals or exceeds 90 dBA.
   - By any employee who has incurred a STS.

2. HPDs will provide adequate attenuation to reduce exposures to 85 dBA or less for employees that have experienced a STS, and to less than 90 dBA for all other employees enrolled in the Program.

3. The suitability of the employee's hearing protector device will be re-evaluated whenever a change in working conditions may render the HPD inadequate. If workplace noise levels increase, employees will be provided with more effective HPDs. This alternate HPD must reduce employee exposures to at least 90 dB and to 85 dB when an STS already has occurred in the worker's hearing. Employees will be instructed on how to use and care for their protectors and supervised on the job to ensure that they continue to wear them correctly.

H. Training

1. Each employee in the Hearing Conservation Program will receive training within 6 months of the employee's first exposure to workplace noise equal to or exceeding an 8-hour TWA of 85 dBA.

2. Training will cover: (a) effects of noise on hearing; (b) purpose of hearing protection; (c) advantages and disadvantages of various types of hearing protection; (d) selection, use, fitting and care of hearing protector devices; and (e) purpose and procedures for audiometric testing.

3. Training may be provided by means of stand-up presentations by Environmental Health & Safety (EHS) staff, video-based training, online, text-based training through an EHS website, or any combination thereof as long as the required topics are covered.

4. Training program will be repeated annually.

5. All employees enrolled in the Hearing Conservation Program will be required to participate in the initial and annual training programs.

6. The program administrator will maintain a record of all training provided to employees, indicating the date on which the training session occurred, the training method, the name(s) of person(s) providing the training, and the names of all employees who participated.

III. Responsibilities

A. *Hearing Conservation Program Coordinator's Responsibilities*:

- Annually review employee noise exposures in all work areas and near all equipment.
- Notify each employee exposed to noise levels of 90 dBA or more of the results of monitoring.
- Notify the Environmental Health & Safety department when any new noise sources are introduced.
- Minimize noise levels through use of engineering and administrative controls.
- Offer a variety of hearing protector devices. Provide employees with a selection of at least one type of earplug and one type of hearing muff. Employees should decide, with the help of a person trained to fit hearing protector devices, which size and type of HPD is most suitable for the working environment. The HPD selected should be comfortable to wear and offer sufficient protection to reduce noise levels to within the acceptable limits, as per the Cal/OSHA safety order.
- Ensure that employee training sessions and audiograms are performed annually.
- Maintain proper records of all noise level measurements taken, training sessions provided, audiograms and evaluations performed, notifications given to employees, and HPDs provided.
- Ensure all high noise level areas and equipment have signage requiring use of hearing protection posted or affixed.
- Make available to employees and post in the workplace a copy of Control of Noise Exposure (Cal/OSHA GISO Article 105 [for California employers]) and Access to Employee Exposure and Medical Records (Cal/OSHA – GISO Section 3204).
- Make available upon request by Occupational Health and Safety Administration any information related to the training and education program.

B. *Manager's and/or Supervisor's Roles and Responsibilities:*

- Notify the program coordinator when any new noise sources are introduced.
- Participate in supervisors' "Hearing Conservation Program" training session.
- Ensure employee participation in training program.
- Ensure workers use hearing protection as required.
- Report non-compliant workers or violations of the program's policies to the Human Resources Department for corrective action, if necessary.

C. *Environmental Health and Safety Department Manager's Roles and Responsibilities:*

- Conduct noise monitoring and notify affected employees of their exposure.
- Provide training services.
- Recommend appropriate hearing protection.

- Audit this departmental program annually.

D*. Employee's Roles and Responsibilities:*

- Attend training and undergo audiometric testing if needed.
- Comply with all rules and procedures related to the Hearing Conservation Program.
- Wear appropriate hearing protection as required.
- Report any concerns over the effectiveness or comfort of HPDs issued.
- Avoid exposure to high noise levels outside of work.

Appendix A

Employees Enrolled in Hearing Conservation Program*

	Employee's Name
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***** *All employees included in this roster must be tested annually and this schedule must be amended as per results of the annual tests and results.*

Appendix B

Schedule of High Noise Level Areas*

	Name of Location
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***** *All areas in this schedule must undergo noise level monitoring whenever a change in production, process, equipment, or controls increases noise exposures whenever additional employees may be exposed at or above the action level or the attenuation provided by the hearing protector devices being used by employees may be rendered inadequate to meet the requirements of Cal/OSHA Section 5098 (b).*

Schedule of High Noise Level Equipment*

	Name of Equipment and Location
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***** *All equipment in this schedule must undergo noise level monitoring whenever a change in production, process, equipment, or controls increases noise exposures whenever additional employees may be exposed at or above the action level or the attenuation provided by the hearing protector devices being used by employees may be rendered inadequate to meet the requirements of Cal/OSHA Section 5098 (b).*

Appendix C

Safety Training Record

Matricula de Entrenamiento

Name of Company / Organization *Nombre de la Empresa*:	

Name of Trainer / Affiliation* *Nombre del Entrenador*	**Topic / Title of Program** *Titulo del Tema / Programa*	**Date of Training Fecha**

Training Media Used – *(Circle the appropriate one used)*

Lecture/Demonstration	**Online**	**Video**	**Webinar**

Print Employee's Name / Nombre de Empleado		**Signature / Firma**
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