CITY OF SACRAMENTO REGULATORY COMPLIANCE PROGRAM
TOPIC: HEARING CONSERVATION PROGRAM
EFFECTIVE DATE: 07/21/10
SUPERSEDES: N/A
SECTION: RCP #8

PURPOSE

The objective of the Hearing Conservation Program (HCP) is to prevent noise-induced hearing loss resulting from on-the-job noise exposure. To ensure compliance with the California Code of Regulations, Title 8, Sections 5095-5100 (8CCR5095-5100), this regulatory compliance program provides guidance to managers and staff on the City's HCP which applies to all employees who are determined to be at or to exceed the action level established in 8CCR5095. Attachment A lists definitions of the terms used in the HCP.

RESPONSIBILITIES

1. **Department Managers and Supervisors will:**

    a. Implement the HCP throughout his or her department;

    b. Request help from the Environmental Health and Safety (EH&S) staff to study specific operations, facilities, and equipment to determine employee noise level exposures as needed;

    c. Whenever practical, use engineering and/or administrative controls to reduce the noise exposure to employees at or below 85 A-weighted decibels time-weighted average (85 dBA TWA). Engineering controls may include purchasing quieter equipment, installing noise-reducing baffles and placing rubber mats under machinery while administrative controls may include restricting employee exposure time;

    d. Issue appropriate hearing protection devices (HPDs) to employees in areas or operations which have been determined to have noise levels at or above 85 dBA;

    e. Ensure that employees exposed to noise at or above 85 dBA action level participate in annual audiometric examinations (i.e. baseline and annual);

    f. Conduct frequent checks and strictly enforce the proper use of HPDs by employees; and

    g. Conduct documented annual hearing conservation training for employees to include both general information as well as job-specific components.

2. Environmental Health and Safety staff will:

    a. Study specific operations, facilities, and equipment to determine employee noise level exposures;

    b. Help managers and supervisors determine which employees must participate in the HCP. Employees whose noise exposures are equal to or exceeding the action level of 85 dBA TWA or higher are included in the HCP;

c. Schedule and oversee annual audiometric examinations;

d. Maintain all records of noise studies and audiometric examinations.

3. Employees will:

a. Properly and consistently wear and care for his or her HPDs;

b. Participate in annual audiometric testing; and

c. Participate in annual HCP training.

PROCEDURES

1. Noise Monitoring

a. Noise level monitoring will be considered whenever employees have the following:

1. Difficulty communicating by speech while in the noise area and the listener and speaker face each other at a distance of two feet;

2. Complaints regarding headaches and/or ringing in the ears after working in a noise area for extended periods; or

3. Temporary loss of hearing that has the effect of muffling speech and other sounds after extended exposure to the noise.

b. Managers and supervisors will determine if any employee is exposed to a daily dose greater than the action limit of 85 dBA by utilizing EH&S staff or qualified contractors to make the determination. If routine or periodic survey monitoring identifies an employee for inclusion in the HCP, additional monitoring may be conducted to obtain measurements of other employees who may be similarly exposed.

2. Hearing Protection Devices

a. Employees who are required to wear hearing protection devices (HPDs) will be given an opportunity to select from a variety of suitable types (e.g. earplugs or earmuffs). Procedures established and implemented by the department will ensure proper issuance, cleaning, maintenance and training in the use of HPDs;

b. HPDs issued to employees will provide an adequate degree of protection to reduce noise exposure below prescribed limits. Each employee receiving a pair of earplugs for reduction of exposure will be fitted by an individual trained in the proper selection and use of earplugs;

c. HPDs are required to be worn if it is determined that a standard threshold shift has occurred as evidenced by audiometric testing or if the eight-hour TWA is at or above 90 dBA.

3. Audiometric Testing

a. All employees identified by monitoring for inclusion in the HCP will participate in preliminary (baseline) and subsequent (annual) audiometric tests. The preliminary audiometric test will be administered at his or her pre-employment physical examination.

4. Recordkeeping

a. The Human Resources Department's Risk Management Division maintains the following records:

1. Noise exposure measurements;

2. Audiometric test results including audiograms, name and classification of employees, date of audiogram, the name of the examiner, date of audiometer calibration, and the date of the employee's last assessment; and

3. Background noise levels in audiometric test facilities.

5. Access to Records

Records will be provided upon written request by employees, former employees, or representatives designated by individual employees.

6. Training:

a. Employees will be informed of hazardous areas through appropriate signage and instructions. Hearing protection will not be issued to an employee until proper use and maintenance procedures have been demonstrated to the employee by the supervisor or qualified designee. Audio-visual training aids, written materials, handouts and online training is available from EH&S. Annual training for employees in the HCP will include the following components:

1. Discussion of the effects of noise on hearing;

2. Purpose of hearing protection;

3. Use and care of HPDs;

4. Advantages and disadvantages of different HPD; and

5. Purpose and explanation of audiometric testing.

Definitions
(Attachment A)

Action Level
An eight-hour weighted average of 85 decibels measured on the A-scale, slow response, or equivalently, a dose of 50 percent.

Attenuate
Reduce the amount of noise.

Audiogram
A chart, graph or table resulting from an audiometric test showing an individual's hearing threshold levels as a function of frequency (from 500 to 6000 Hertz).

Baseline Audiogram
The audiogram against which future audiograms are compared.

Decibel (dB)
A non-dimensional unit used to express noise levels; a logarithmic expression of the ratio of a measured quantity to reference quantity.

Decibel A-weighted (dBA)
Decibels measured on the A-weighted scale, slow response.

Hearing Protection Devices (HPDs)
A device inserted into or placed over the ear for the purpose of reducing air-conducted sounds.

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

Noise
Disturbing, harmful or unwanted sound.

Noise-induced Hearing Loss
Refers to the slowly progressive inner ear hearing loss that results from exposure to continuous noise over a long period of time as contrasted to acoustic trauma or physical injury to the ear.

Permissible Exposure Limit for Noise
90 dBA for eight hours.

Recordable Standard Threshold Shift
A standard threshold shift of 25 dB or greater in either each which is recorded on the Cal-OSHA 300 log for that year.

Standard Threshold Shift (STS)
A change in hearing threshold relative to the baseline audiogram of an average of 10 dB or more at 2000, 3000 and 4000 Hz in either ear.

Time-weighted Average Sound Level (TWA)
That sound level, which f measured over an eight-hour exposure would result in the same noise dose as is measured.