



HEARING CONSERVATION

Integrated Water Services, Inc.
(the Company)



Purpose

The purpose of this program is to provide a process to minimize employee-hearing loss caused by excessive occupational exposure to noise.

Scope

This program is applicable to all employees and contractors who may be exposed to noise in excess of 85 decibels (decibels) on an 8-hour time weighted average, or where impulsive or when impact or impulse noise reaches 140 dB peak sound pressure level at any time.

When work is performed by a subcontractor on a company site, the contractor's written safety program shall take precedence for their employees. However, subcontractors may adopt this procedure for their use.

Definitions

Audiometric testing: sound detection by the person being tested of a series of pure tones. For each tone, the person indicates the lowest level of intensity that they are able to perceive.

Decibels: the sound energy measured by a sound level meter using the "A" scale. The "A" scale is electronically weighted to simulate the response of the human ear to high and low frequency noise.

Slow Response: the setting on the sound level meter that averages out impulses of brief duration that would cause wide fluctuation in the sound level meter reading.

Standard Threshold Shift: a change in hearing threshold relative to the baseline audiogram of an average of 10 dB (corrected for age) at 2000, 3000 and 4000 Hz in either ear.

Key Responsibilities

Managers and Supervisors

- Ensure requirements of this program are established and maintained.
- Ensure employees are trained and comply with the requirements of this program.

Employees

- Wear hearing protection when required, complete assigned safety training, and cooperate with testing and sampling efforts.

Procedure

Occupational hearing loss is a cumulative result of repeated or continued absorption of sound energy by the ear; employee protection is based on reduction of the noise level at the ear or limiting the employee's exposure time. Integrated Water Services shall offer hearing protection to all employees exposed to potential high noise levels in working areas and to those employees requesting hearing protection.



Hearing Conservation Program

A continuing effective hearing conservation program shall be administered when employees are exposed to sound levels greater than 85 dbA on an 8-hour time-weighted average basis or when impact or impulse noise reaches 140 dB peak sound pressure level at any time.

Employees will wear hearing protection in work areas where it is required by signage.

Monitoring Procedures to be Used When Exposure Limits Exceed the Established Level

When information indicates that employee exposure may equal/exceed the 8 hour time-weighted average of 85 decibels, a monitoring program shall be implemented to identify employees to be included in the hearing conservation program.

Surveys

Surveys will be conducted by a qualified employee or third party.

To evaluate noise exposure in terms of possible hearing damage, it is necessary to know the overall sound level ("A" scale measurement), the exposure time of the individual in hours per day and the length of time the individual has worked in the area being surveyed. This data shall be supplemented by the following:

- Name of area and location
- Date and time of survey
- Name of person conducting survey
- Description of instrument used, model and serial number
- Environmental conditions
- Description of people exposed

Integrated Water Services shall notify each employee if their job is exposed to noise at 85 decibels or greater.

Integrated Water Services shall evaluate hearing protector attenuation for the specific noise environments in which the protector will be used. The adequacy of hearing PPE shall be reevaluated whenever noise exposures increase to the point that the PPE provided may no longer provide adequate protection. Integrated Water Services shall then provide more effective PPE where necessary.

All sound measuring equipment must be calibrated before and after each survey. Records of sound measuring equipment calibration and noise level surveys shall be kept for 20 years.

Noise Surveys must be repeated whenever changes in the workplace may expose additional personnel to high noise or hearing protection being used by employees may not be adequate to reduce the noise exposure to a level below 85 decibels.

Sound Level Surveys

- All facilities that are suspected of having noise levels exceeding 85 decibels for 8 hours on a time-weighted average must be screened.

Exposure Surveys:

- A representative sampling of employees shall be conducted to determine the exposure to noise over a period of time.



- Noise dosimeters must be capable of integrating all continuous, intermittent, and impulsive sound levels from 80 dB to 130 dB and must be calibrated so a dose of 50% corresponds to a time weighted average of 85 dB.

Signage

Clearly worded signs shall be posted at entrances to, or on the periphery of, areas where employees may be exposed to noise levels in excess of 85 decibels. These signs shall describe the hazards involved and the required protective actions.

Audiometric Testing

Integrated Water Services must establish and maintain an audiometric testing program for all employees whose exposures equal or exceed the 8-hour time-weighted average of 85 dbA and making medical surveillance monitoring available to all employees whose exposures were equal to or exceeded an 8-hour time-weighted average of 85 decibels.

Baseline Testing Guidelines

- Integrated Water Services shall establish a baseline audiogram for each exposed employees within 6 months of their first exposure. Within 6 months of an employee's first exposure at or above the action level, a valid baseline audiogram shall be established against which future audiograms can be compared.
- When a mobile van is used the baseline shall be established within one year.
- A qualified third party shall perform all audiometric testing, evaluation, reporting and retesting.
- Prior to establishment of a baseline audiogram at least 14 hours without exposure to workplace noise is observed. Testing to establish a baseline audiogram shall be preceded by at least 14 hours without exposure to workplace noise. Hearing protection may be used to meet the requirement. Employees shall also be notified to avoid high levels of noise.

Annual Testing Guidelines

Integrated Water Services shall provide an annual audiogram and if a standard threshold shift has occurred the employee will be notified in writing within 21 days of determination. At least annually after obtaining the baseline audiogram, Integrated Water Services shall obtain a new audiogram for each employee exposed at or above an 8-hour time-weighted average of 85 decibels. Each employee's annual audiogram shall be compared to that employee's baseline audiogram to determine if the audiogram is valid and if a standard threshold shift has occurred. If a comparison of the annual audiogram to the baseline audiogram indicates a standard threshold shift, the employee shall be informed of this fact in writing, within 21 days of the determination.

Steps That Are Taken When Standard Threshold Shift Occurs

- Hearing protection shall be re-evaluated and/or refitted, and
- If necessary, a medical evaluation may be required, and
- The employee shall be advised to wear hearing protection and if necessary, a reassignment of duties may be deemed appropriate.

Required Recordkeeping

Integrated Water Services shall maintain accurate records of all employee exposure measurements and all records are maintained as required by CFR 1910.95 (Occupational Noise Exposure).



Employee audiograms are considered medical/exposure records. These records must be kept for the length of employment plus 30 years.

Hearing Protection Devices

- Hearing protectors are available to all employees exposed to an 8-hour time-weighted average of 85 decibels at no cost to the employee.
- Hearing protection shall be replaced as necessary.
- Integrated Water Services shall ensure that hearing protectors are worn. Employees shall be properly trained in the use, care and fitting of protectors. This is done at no cost to employees.
- Employees shall be given the opportunity to select their hearing protectors from a variety of suitable hearing protectors provided by Integrated Water Services.

TRAINING

Employees must be provided with training on at least an annual basis and shall be updated to be consistent with changes in the PPE and work processes.

A training program shall be provided for all employees who are exposed to action level noise.

The training shall be repeated annually for each employee. Training shall be updated consistent to changes in PPE and work processes. Integrated Water Services shall make available to affected employees copies of the noise exposure procedures and shall also post a copy in the workplace. Integrated Water Services shall also allow the Assistant Secretary and the Director access to records.

All training must and shall be documented.

All staff shall have ready access to this program via www.iws.support.