Hearing Conservation Requirements for Noise Exposure

Below 85 dBA – 8 Hr TWA
Employer has no hearing conservation program requirements.

85 to 90 dBA – 8 Hr TWA
The employer shall administer a continuing, effective Hearing Conservation Program (HCP). This program shall include the following:
1. Workplace noise level monitoring
2. Employee notification of noise exposure
3. Audiometric testing of employees exposed
4. Employer provided personal hearing protective devices to employees. (Use of the devices is optional for employees).
5. Hearing conservation related training of employees.
6. Hearing conservation related record keeping.

Above 90 dBA – 8 Hr TWA
The employer shall utilize feasible administrative and engineering controls to reduce sound levels to within acceptable levels.

In addition, the employer shall administer a continuing, effective Hearing Conservation Program (HCP). This program shall include the following:
1. Workplace noise level monitoring
2. Employee notification of noise exposure
3. Audiometric testing of employees exposed
4. Employer provided personal hearing protective devices to employees. (Use of the devices is mandatory for employees).
5. Hearing conservation related training of employees.
6. Hearing conservation related record keeping.

Reference:
OSHA 29 CFR 1910.95 (Occupational Noise Exposure)

Hearing Conservation Guidelines
Hearing Conservation Programs are required for all employees exposed to 85 dBA of higher noise level on an 8 – Hour Time Weighted Average (TWA) basis. Such programs include:

Monitoring employees exposed to 85 dBA – TWA of more:
1. Measurements may be
   a. Individual with dosimeter, or
   b. Representative, with sound level meter measurements at workstations or areas.
2. Calibration of measurement equipment must be before and after each day’s used.
3. Equipment must meet designated standards.*
Audiometric Testing of employees exposed to 85 dBA-TWA or more:
1. Testing must be by qualified personnel, supervised or by an audiologist or qualified physician.
2. Interpretation must be by an audiologist or otolaryngologist or qualified physician.
3. Baseline and Annual audiograms are required.
4. A minimum of 14 hours of elapsed time since the last noise exposure above 80 dBA.
5. Acoustical calibration of audiometer should be performed at least annually and biologically before each day’s use.
6. Equipment must meet designated standards.**
7. Environment for audiometric testing must meet designated standards.***

Hearing Protectors available to all employees exposed to 85 dBA – TWA or more:
1. Monitoring must assure consistent and proper use.
2. Fitting must be correct.
3. Training in use and care of protectors in accordance with manufacturer’s instruction is required.
4. Protection from noise offered by hearing protectors (ear plugs or ear muffs) must reduce noise reaching the workers ear to 90 dBA and to 85 dBA for workers that audiograms show beginning hearing loss.

Recordkeeping for employees required to have a hearing conservation program must include:
1. Employee Noise Exposure to Area Measurements (monitoring results).
2. Audiograms.
3. Calibration of equipment.
4. Environmental conditions of test rooms or areas.
5. Retention of records
   a. Two years for noise measurements.
   b. Length of employment plus five years for audiometric tests, background levels and audiometric calibrations.
6. Transfer of records, when business is sold, merged or otherwise disposed of, for maintenance for the required durations.

* Dosimeters – Dosimeters shall meet the Class 2A-90/80-5 requirements of the American National Standard Specification for Personal Noise Dosimeters, S1.25-1978, with an operating range of at least 80 dB to 130 dB. Dosimeters shall also meet the performance requirements of section 7.5 or ANSI S1.25-1978 for a test signal at an average A-weighted sound level of 90dB having a crest factor of 30 dB.

Sound Level Meters – Sound level meters shall meet the Type II requirements of the American National Standard Specification for Sound Level Meters, S1.4-1971 (R1976).

** Audiometric Calibration shall be checked acoustically, at least annually. The equipment necessary to perform these measurements is a sound level meter, octave band filter set, and a National Bureau of Standards 9A coupler. In making these measurements, the accuracy of the calibrating equipment shall be sufficient to determine that the audiometer is within the tolerance permitted by American National Standard Specification for Audiometers, S3.6-1969.

*** Rooms used for audiometric testing shall not have background sound pressure levels exceeding those in Table 1 when measured by equipment conforming at least to the Type II requirements of American National Standard Specifications for Sound Level Meters, S1.4-1971 (R1976), and to the Class II requirements of American National Standard Specification for Octave, Half-Octave, and Third Octave Band Filter Sets, S1.11-1971 (R1976).
Our safety evaluations, reports and recommendations are made solely to assist your organization in reducing hazards and the potential of hazards and accidents. These recommendations were developed from conditions observed and information provided at the time of our visit. They do not attempt to identify every possible loss potential, hazard or risk, nor do they guarantee that workplace accidents will be prevented. These safety evaluations, reports and recommendations are not a substitute for ongoing, well-researched internal safety and risk management programs. This report does not warrant that the property inspected and its operations are compliant with any law, rule or regulation.

United Heartland is the marketing name for United Wisconsin Insurance Company, a member of AF Group. All policies are underwritten by a licensed insurer subsidiary of AF Group.

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**Table 1**

<table>
<thead>
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<th>Frequency (Hz)</th>
<th>500</th>
<th>1000</th>
<th>2000</th>
<th>4000</th>
<th>8000</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sound Pressure Level (dB)</td>
<td>40</td>
<td>40</td>
<td>47</td>
<td>57</td>
<td>62</td>
</tr>
</tbody>
</table>