Program Subject: Hearing Conservation Program

1. PURPOSE
   1.1 To ensure that UW-Eau Claire complies with the Occupational Safety and Health Administration (OSHA) regulation, “Occupational Noise Exposure Standard” (29 CFR 1910.95).

2. SCOPE
   2.1 To prescribe the general requirements of the hearing conservation program to protect the hearing of personnel working in areas, or around equipment (even portable equipment), where noise levels exceed the OSHA Action Level (AL) of 85 decibels A-weighted Scale.
   2.2 To prevent occupational noise exposure that could lead to noise-induced hearing loss.

3. RESPONSIBILITIES
   3.1 Department of “Risk Management and Safety” (RM&S)
      3.1.1 Be responsible for ensuring the development and implementation of this policy.
      3.1.2 Provide necessary resources as available to carry out the program.
      3.1.3 Evaluates and ensures adequacy of respiratory protection equipment before the purchase and issuance to individuals.
      3.1.4 Conduct the initial monitoring for employees exposed to noise levels at or above 85 dBA for an 8-hour time weighted average (TWA).
      3.1.5 Conduct or coordinate monitoring in high noise areas for investigating engineering controls and verifying the effectiveness of engineering controls.
      3.1.6 Ensure that equipment or shop areas that are subject to high noise levels are clearly marked by stickers and/or signs.
      3.1.7 Provide training that includes the proper fitting, care, and cleaning of hearing protectors.
      3.1.8 Conduct an evaluation to determine the continued effectiveness of the program.
   3.2 Supervisors
      3.2.1 Request noise assessment in areas that may expose employees to levels equal to or above an 8-hour time-weighted average of 85 dBA.
      3.2.2 Ensure that all employees are aware of the requirements for hearing protection in any area that has been identified as having levels, which are at or above (AL).
      3.2.3 When practical, limit employees scheduled work time in a noisy area.
      3.2.4 Provide an appropriate protective devices and other control measures are observed.
      3.2.5 Coordinate employee attendance at training on hearing conservation and the proper use and care of hearing protectors.
      3.2.6 Request additional noise monitoring when processes or procedures change that may affect noise levels.
      3.2.7 Ensure that audiograms are provided annually to all employees exposed to noise levels 8-hour TWA or 85 dBA or more.
      3.2.8 Ensure that employees are following the Hearing Conservation Program.
   3.3 Employees
3.3.1 Comply with the recommendations of the (RM&S) Hearing Conservation Program.
3.3.2 Wear hearing protectors when using equipment generating noise at or above 85 dBA or in designated hearing conservation areas.
3.3.3 Report any new sources of excessive noise, or noticeable changes in noise levels of existing equipment to the immediate supervisor so that a survey can be made.
3.3.4 Maintain hearing protection equipment and supplies in good condition.
3.3.5 Attend hearing conservation training classes offered by (RM&S).

4. PROGRAM COMPONENTS
4.1 The Hearing Conservation Program (HCP) is provided when an employee's noise level is at or above an 8-hour time weighted average (TWA) of 85 dBA and consists of:
4.1.1 Noise Identification
   a. To identify by measuring noise levels in the workplace, conducting personal monitoring, investigating accidents and incidents, investigating complaints etc.
   b. To monitor sound levels using a technique that combines; use of a sound level meter and estimates of the length of time individuals are exposed to sound levels to calculate an 8-hour (TWA) dBA, or by a personal sampling method using analog sound meter. See Appendix A.
4.1.2 Noise Assessment
   a. To assess employee's noise exposure level. This shall be measured whenever any change relating to noise production is suspected of increasing exposures to the extent that additional employees may be exposed at or above the action level.
4.1.3 Controlling Noise Exposure: Where an assessment shows that an employee's exposure to noise in the workplace is likely to exceed the action level, a written plan of action to control the noise must be prepared within six (6) months and control measures for the interim must be implemented.
   a. Noise Control Plan
      Should include:
      ✓ summary of background of noise assessment and any current controls noise
      ✓ description of the additional measures proposed
      ✓ estimated reduction in noise levels and exposure of employees
      ✓ timeframes for implementing proposed control measures and their priority
      ✓ assessment of the effectiveness of the control measures
   b. Hierarchy of Control Measures:
      ✓ Elimination – A permanent solution. This should be attempted in the first instance.
      ✓ Substitution – A control involving replacing the hazardous equipment or work process with a less hazardous means.
      ✓ Engineering – Any modification or replacement of equipment or related physical change at the noise source or along the transmission path that reduces the noise
level at the employee’s ear in the workplace. In addition, engineering controls include barriers, damping, isolation, muffling, noise absorption, mechanical isolation, and variations in force.

✓ Administration – Any change in work assignment, production schedules or policy decisions that reduce workers’ noise exposure that include:
  o Change the work schedule and change operations
  o Transfer workers, rotation, and training

✓ Personal Protective Equipment – When engineering and/or administrative controls either fail to reduce noise to within required limits or are not technologically feasible, hearing protectors must be used including earmuffs or earplugs, and canal caps.

c. Noise Control – Methods can be used to control noise at the:
  ✓ Source (highest priority) and path (along which the noise is transmitted)
  ✓ Receiver (employee who is exposed)

4.1.4 Hearing Protection – Hearing protectors must be made available to all Facilities Management employees exposed at or above the Action Level (AL) of an 8-hour (TWA) of 85 dBA. The use of hearing protection is mandatory for those exposed at or above the AL.

a. Hearing protection must reduce exposure to below 90 dBA, or to below 85 dBA for those exhibiting a Permissible Noise Exposure.

Table 1.0 – Permissible Noise Exposures

<table>
<thead>
<tr>
<th>Duration Per Day (hours)</th>
<th>Sound Level Slow Response (dBA)</th>
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<tbody>
<tr>
<td>8</td>
<td>90</td>
</tr>
<tr>
<td>6</td>
<td>92</td>
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<tr>
<td>4</td>
<td>95</td>
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<td>3</td>
<td>97</td>
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<td>2</td>
<td>100</td>
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<td>1 ½</td>
<td>102</td>
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<tr>
<td>1</td>
<td>105</td>
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<tr>
<td>½</td>
<td>110</td>
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<tr>
<td>¼</td>
<td>115</td>
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</table>

b. Building Manager will provide a variety of suitable hearing protectors, including at least one type of earplug and one type of earmuff.

c. The hearing protectors will be supplied to employees at no cost, and replaced as necessary. However, Building Manager will not be expected to pay for an unlimited supply of protectors or to replace devices that are lost or damaged due to employee negligence.

4 TRAINING
4.1 UW-Eau Claire employees who are required to work in hearing protection areas shall receive training in all aspects of this policy.

4.1.1 Training will be provided to employees upon initial work assignment to areas that are identified as excessively noisy, and annually thereafter or as needed. This is to ensure that they understand the health risks associated with noise exposure, and that they comply with this policy.

4.1.2 Each covered employee must receive annual training that includes the following topics:
   a. Effects of noise on hearing
   b. Use of hearing protection
   c. Purpose of audiometric testing
   d. Access to records

4.2 UW-Eau Claire is required all employees exposed to noise levels 8-hour TWA or 85 dBA or more to have audiograms annually.

5. RECORD KEEPING

6.1 Noise exposure measure records and audiograms shall be kept for the duration of a worker’s employment.

5.1.1 The (RM&S) will maintain documentation of Hearing Conservation Training.

6. DEFINITIONS

6.1 Decibel (dB) – A unit used to express sound power level (LW). Sound power is the total acoustic output of a sound source in watts (W).

6.2 Action Level (AL) – An 8-hour time-weighted average of 85 decibels measured on the A-scale slow response, or equivalently, a dose of fifty percent.

6.3 Permissible Exposure Limit (PEL) – The exposure limit at which feasible noise controls and hearing protection would be required. Note: OSHA sets the PEL at 90 dBA. UW-Eau Claire’s policy is to have these requirements triggered at the Action Level.

6.4 Audiogram – The record of a given individual’s hearing sensitivity. An audiogram shows hearing threshold level measured in decibels as a function of frequency measured in hertz.

6.5 Time Weighted Average (TWA) – The average of various levels of exposure encountered over some specific time.

APPENDIX A. Noise Levels Recording Form
Program Subject: Hearing Conservation Program

Department: __________________________ Location/Area: __________________________ Employee’s Name (Print): __________________________

Job Activity Type: __________________________ Supervisor: __________________________ Exposure Duration Per Day: __________________

Sound Measuring Equipment Used: __________________________ Hearing Protection Used: __________________________

Noise Types:  □ CONTINUOUS  □ INTERMITTENT  □ IMPULSE

### MEASUREMENT DATA

<table>
<thead>
<tr>
<th>Identified Noise Exposure Hazards</th>
<th>Minimum Noise</th>
<th>Maximum Noise</th>
<th>TWA Exposure Duration</th>
<th>PNE^ Duration Per Day (Hours) For:</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>RFCR*</td>
<td>Minimum Noise</td>
<td>Maximum Noise</td>
<td>TWA</td>
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**Risk Factor Criticality Ranking (RFCR)**

<table>
<thead>
<tr>
<th>RFCR</th>
<th>Description</th>
<th>Hierarchy of Risk Control Methods</th>
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</thead>
<tbody>
<tr>
<td>A</td>
<td>High Priority</td>
<td>Elimination/Substitution</td>
</tr>
<tr>
<td>B</td>
<td>Mandatory</td>
<td>Engineering</td>
</tr>
<tr>
<td>C</td>
<td>Minimal Risk</td>
<td>Administrative/Work Practices</td>
</tr>
<tr>
<td>D</td>
<td>Recommended</td>
<td>PPE</td>
</tr>
</tbody>
</table>

**Hierarchies of Risk Control Methods**

- **A = High Priority**: Start corrective action immediately and correct within 30 days. Elimination/Substitution
- **B = Mandatory**: Start corrective action and correct within 90 days. Engineering
- **C = Minimal Risk**: Start corrective action & correct within 120 days; managing by routine procedures. Admin./Work Practices
- **D = Recommended**: Ensure safety rules and/or engineering protection is in place. PPE

**Details of Action**: When determining action plan, please refer to Hierarchy of Risk Control Methods.

**Note**: ^ PNE – Permissible Noise Exposure. * RFCR – Risk Factor Criticality Ranking

Noise Assessor: ___________ Date: ___________ Reviewed by Supervisor: ___________ Date: ___________

Planned Completion Dates: ___________ Actual Completed Dates: ___________ Reviewed by (RM&S): ___________ Date: ___________