HEARING CONSERVATION PROGRAM

Prepared for:

County College of Morris

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Prepared by:

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1. Scope

This Hearing Conservation Program is applicable to all areas of the County College of Morris (CCM) Campus, located at 214 Center Grove Road, Randolph, NJ, and to CCM employees working on campus.

This program shall include noise monitoring, audiometric testing, hearing protectors, annual employee training, and recordkeeping.

2. Purpose

It is the intention of CCM to comply with the Public Employees Occupational Safety and Health (PEOSH) Occupational Noise Exposure Standard, which has been adopted by reference from the U.S. Department of Labor "Occupational Noise Exposure Standard" (29 CFR 1910.95).

This Program shall apply to all CCM employees with occupational noise exposures that equal or exceed the action level of 85 decibels on the A-weighted scale (dB/A) calculated as an 8 hour time weighted average. These exposures are calculated without regard to attenuation provided by the use of personal protective equipment. Efforts shall be made to reduce occupational noise levels to below the action levels where possible through the use of engineering and administrative controls.

3. Definitions

Action Level – Noise level equal to a time weighted average of 85 decibels on the A-weighted scale, for an 8-hour duration.

Audiogram – A chart, graph, or table resulting from an audiometric test of an individual showing the hearing threshold levels as a function of frequency.

Attenuation – Reduction of the noise exposure level by a certain amount when an employee is properly wearing hearing protection.

Decibel – Unit of measure for sound levels.

Standard Threshold Shift (STS) – A change in a person's hearing threshold relative to the baseline audiogram of an average of 10 dB/A or more at 2000, 3000, and/or 4000 Hz in either ear.
In determining whether a standard threshold shift has occurred, allowance may be made for the contribution of aging (presbycusis) to the change in hearing level by correcting the annual audiogram according to the procedure described in Title 29CFR 1910.95 Appendix F: "Calculation and Application of Age Correction to Audiograms".

Time-Weighted Average – The time-weighted average concentration for a normal 8-hour work day, and a 40-hour work week, to which nearly all workers may be repeatedly exposed, day after day, without adverse effect.

4. Program Responsibilities

4.1. Compliance Officer

4.1.1. Establish and update the Hearing Conservation Program;
4.1.2. Identify and assess elevated noise sources, and assist departments in development of methods for noise abatement, reduction, or control;
4.1.3. Coordinate noise surveys and exposure measurements;
4.1.4. Recommend hearing protection devices for employees that provide adequate attenuation for their noise exposure;
4.1.5. Identify employees for inclusion in the Hearing Conservation Program;
4.1.6. Provide technical support to Health Services in regards to audiometric testing;
4.1.7. Coordinate employee training; and,
4.1.8. Maintain records associated with the Hearing Conservation Program.

4.2. Department Directors

4.2.1. Support and enforce elements of this program that apply to Department employees including, but not limited to; completion of noise monitoring, participation in training, and participation in audiometric testing;
4.2.2. Report potentially excessive noise exposures to the Compliance Officer for assessment;
4.2.3. Consider engineering controls for noise exposure when purchasing or leasing equipment, machinery and tools.

4.3. Department Supervisors

4.3.1. Notify Compliance Officer of new equipment or tasks that may expose employees to excessive noise levels;
4.3.2. Assist in development of methods for noise abatement, reduction, and control;
4.3.3. Schedule employees to attend training and audiograms;
4.3.4. Ensure adequate hearing protection devices are available to employees, and worn when required;
4.3.5. Report noise-related issues raised by employees to Compliance Officer for evaluation;
4.3.6. Ensure employees are not exposed to excessive noise levels for a minimum of 14 hours before a scheduled audiogram.

4.4. Employees

4.4.1. Attend annual program training and audiograms as scheduled;
4.4.2. Participate in noise monitoring as requested;

4.4.3. Assist in development of methods for noise abatement, reduction, and control;
4.4.4. Use, store, inspect, maintain, and replace hearing protection devices as instructed;
4.4.5. Report issues with hearing protection devices to respective supervisor;
4.4.6. Notify supervisor of any potential sources of occupational noise;
4.4.7. Report any noise-related medical symptoms to their respective supervisor.

4.5. Health Services
4.6. Maintain all medical records required by the Hearing Conservation Program.

5. Noise Monitoring

5.1. Noise monitoring of the work environment shall be conducted where it is reasonably expected to be at or above the action level of 85 dB/A. Noise monitoring surveys shall be documented and kept on file.

5.2. There are two devices used to measure occupational noise exposure:

5.2.1. A sound level meter is a device used to measure the intensity at a given moment;
5.2.2. A noise dosimeter is an instrument which stores sound level measurements and integrates those measurements over time, providing an average noise exposure reading for a given period of time. Dosimeters can be used to determine an average noise level in a certain area, or they can be affixed to an employee to determine the average noise level that person was exposed to over a given period of time.

5.3. Instruments shall be calibrated before and after each use with a calibrated instrument supplied by the manufacturer.

5.4. Monitoring shall be repeated whenever there has been a change in equipment or controls, and there is a concern that:

5.4.1. Additional employees may be exposed to excessive noise levels;
5.4.2. The attenuation provided by hearing protection devices may be rendered inadequate to meet requirements.

5.5. Employees shall be advised of monitoring results, and protections necessary if results indicate they are exposed to noise levels at or above the action level of 85 dB/A based on an 8 hour time-weighted average.

5.6. Employees or their representatives shall be given the opportunity to observe and noise measurements taken in their work area.

6. Hierarchy of Controls

The OSHA Occupational Noise Standard requires implementation of feasible engineering and administrative controls to reduce employee exposure to excessive noise levels, with personal protective equipment being used and training provided to affected employees until sound levels are reduced to below the action level.

6.1.1. Engineering Controls

Engineering controls are methods that reduce noise exposure by decreasing the amount of noise reaching the employee through engineering design approaches. Management should evaluate the feasibility of engineering controls when equipment is to be replaced or modified. Engineering controls may involve reduction of noise at the source, interrupting the noise path, reduction of vibration, equipment isolation or equipment substitution. Examples may include replacing worn, loose or unbalanced parts, lubricating machines or substituting machinery.

6.1.2. Administrative Controls

Administrative controls are methods that reduce noise exposure by limiting the time a worker is exposed to noise. An example would be to rotate workers to job assignments with lower sound exposure levels throughout their 8-hour work day.

6.1.3. Personal Protective Equipment

When noise control measures are not feasible, do not reduce exposure below the action level, or until such time as they are installed, hearing protection devices are the only way to prevent excessive noise exposure for employees.

7. Audiometric Testing Program

7.1. Audiometric Testing Requirements

7.1.1. CCM shall utilize an audiometric testing program as provided in this paragraph by making audiometric testing available to employees with occupational exposures that are at or above an 8-hour time-weighted average of 85 dB/A. Audiometric testing shall be provided at no cost to employees.

7.1.2. All audiometric tests shall be performed by a licensed or certified audiologist, otolaryngologist, or other physician, or by a technician who is certified by the Council of Accreditation in Occupational Hearing Conservation, who has satisfactorily demonstrated competence in administering audiometric examinations, obtaining valid audiograms and properly using, maintaining, and checking calibration and proper functioning of the audiometers being used. A technician who operates microprocessor audiometers does not need to be

certified. A technician who performs audiometric tests must be responsible to an audiologist, otolaryngologist, or physician.

7.1.3. All audiometric tests shall meet the requirements of Title 29CFR 1910.95 Appendix C: "Audiometric Measuring Instruments".

7.1.4. Department Supervisors shall notify employees of the need to avoid high levels of non-occupational noise exposure during the 14 hour period immediately preceding the audiometric examination.

7.2. Baseline Audiogram

7.2.1. CCM employees who are exposed to occupational noise above the action level based on their job assignment, shall receive a baseline audiogram within 6 months of assignment.

7.2.2. Testing to establish a baseline audiogram shall be preceded by at least 14 hours without exposure to workplace noise.

7.2.3. Hearing protection devices may be used as a substitute for the requirements that baseline audiograms be preceded by 14 hours without exposure to workplace noise.

7.3. Annual Audiogram

7.3.1. CCM employees who are exposed to occupational noise levels above the action level based on their job classification shall also receive an annual audiogram.

7.3.2. Each annual audiogram shall be compared to the baseline audiogram of the employee to determine if the audiogram is valid and if a standard threshold shift has occurred.

7.3.3. If the annual audiogram shows that an employee has suffered a standard threshold shift, a re-test may be obtained within 30 days and the results of the re-test considered as the annual audiogram.

7.4. Audiogram Follow-up Procedures

7.4.1. If a comparison of the annual audiogram to the baseline audiogram indicates a standard threshold shift has occurred, the employee shall be informed of this fact in writing, within 21 days of the determination.

7.4.2. The following steps shall be taken when a **work-related** standard threshold shift occurs:

7.4.2.1. Employees not using hearing protection devices shall be fitted with hearing protectors, trained in their use and care, and required to use them.

7.4.2.2. Employees already using hearing protection devices shall be refitted and retrained in the use of hearing protection, and provided with protectors offering greater attenuation, if necessary.

7.4.2.3. The employee shall be referred for a clinical audiologic evaluation or an ontological examination, as appropriate, if additional testing is necessary, or if there is suspicion that a medical pathology of the ear is caused or aggravated by wearing the hearing protectors.

7.4.2.4. The employee shall be informed of the need for an otologic examination if a medical pathology of the ear that is unrelated to the use of hearing protectors is suspected.

8. Hearing Protection Devices

8.1. Use and Fit of Hearing Protection Devices

8.1.1. Hearing Protection devices shall be made available to CCM employees exposed to an 8-hour, time-weighted average of 85 dB/A or greater at no cost to employees. Hearing protection devices shall be replaced as necessary.

8.1.2. CCM Management shall ensure that hearing protection devices are worn:
- 8.1.2.1. By employees who are required to wear hearing protection devices based on the job hazard analysis for their respective job classification or task;
- 8.1.2.2. By any CCM employee who is exposed to an 8 hour, time-weighted average of 85 dB/A or greater, and who:
  - 8.1.2.2.1. Has not had a baseline audiogram established pursuant to paragraph 5.2 of this section, or
  - 8.1.2.2.2. Has experienced a standard threshold shift.

8.1.3. CCM employees shall be given an opportunity to select their hearing protection devices from a variety of suitable hearing protectors provided in the workplace.

8.1.4. CCM employees shall not substitute or use personal hearing protection devices without written approval from the Compliance Officer.

8.1.5. Department Supervisors shall ensure proper initial fitting and supervise the correct use of all hearing protection devices.

8.2. Hearing Protector Attenuation

8.2.1. The Compliance Officer shall evaluate hearing protector attenuation for the specific noise environments in which each protector is used.

8.2.2. Hearing protection devices must attenuate occupational noise exposure at least to an 8-hour, time weighted average of 90 dB/A.

8.2.3. For employees who have experienced a standard threshold shift, hearing protectors must attenuate noise exposure to an 8-hour, time-weighted average of 85 dB/A or lower.

8.2.4. The adequacy of hearing protector attenuation shall be re-evaluated whenever employee noise exposures increase to the extent that hearing protection devices provided may no longer provide adequate attenuation.

9. Employee Training

9.1. The Compliance Officer shall administer the Hearing Conservation Training program for CCM employees.

9.2. All employees exposed to occupational noise at or above the action level of 85dB/A shall attend Hearing Conservation Program training upon assignment, and annually thereafter.

9.3. The training program shall include:

9.3.1. The effects of noise exposure and age on hearing;
9.3.2. The purpose of hearing protection;
9.3.3. The advantages, disadvantages, and attenuation of various types of hearing protection devices;
9.3.4. Instruction on selection, fit, use, care and replacement of hearing protection devices;
9.3.5. The purpose of audiometric testing and an explanation of the test procedures.

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10. Recordkeeping

10.1. Exposure measurements records shall be maintained by the Compliance Officer for a period of 2 years.

10.2. Audiometric testing records shall be maintained by Health Services for the duration of employment for each CCM employee.

10.3. All records shall be provided upon request to employees, former employees, and representatives designated by the individual employee.

11. Program Review

This program shall be reviewed annually and updated as necessary by the Compliance Officer or their designee.

11.1. The program review shall include:

11.1.1. A review of the applicable OSHA Standard, and comparison to the existing program for compliance;
11.1.2. A review of training records to ensure attendance by all affected employees;
11.1.3. A review of audiogram testing records to ensure completion by all affected employees;

11.1.4. Interview with employees to solicit for program issues and ideas for improvement.
11.1.5. A formal report shall be generated and kept on file for a period of 1 year.