DEPARTMENT OF CORRECTIONS

Policy:	**105.114**
Title:	**Hearing Conservation Program**
Effective Date:	**11/19/18**

PURPOSE: To provide procedures to prevent occupational hearing loss. Facilities and work units must prevent work-related hearing loss by providing a program of annual audiometric monitoring, personal hearing protection, staff training, and noise-level engineering controls.

APPLICABILITY: All facilities/work units that have operations producing employee noise exposure in excess of the action level.

DEFINITIONS:

Action level – an eight hour time-weighted average of 85 decibels, or a dose of fifty percent.

Audiogram – a test of an individual's hearing threshold level as a function of frequency.

Baseline audiogram – initial audiogram against which future audiograms are compared.

dBA – decibel level using the A-weighted scale.

Decibel (dB) – sound-level unit of measurement.

Hertz (Hz) – frequency unit of measurement, using cycles of sound wave per second.

Otolaryngology – ear, nose, and throat medical specialty.

Permissible exposure limit (PEL) – an eight hour A-weighted exposure level of 90 decibels, with a five dB increase allowed for every halving of exposure duration.

Qualified individual – a person whose training, education, and/or experience specifically qualifies the person to do the job.

Standard threshold shift – a 10dB (at 2000, 3000, or 4000 Hz) change in either ear from the baseline audiogram.

Time-weighted average sound level (TWA) – weighted average sound level over a given amount of time, usually eight hours.

PROCEDURES:

A. Responsibilities

1. All employees must:
   a) Report to his/her supervisor any noise exposure requiring evaluation; and
   b) Use and maintain assigned hearing protection.

2. Supervisors must:

a) Schedule audiometric monitoring of affected employees with the contracted health care provider;
b) Notify safety administrator/designee when noise exposures need to be evaluated;
c) Ensure that employees use and maintain assigned hearing protection; and
d) Provide annual training to employees.

3. The safety administrator or other qualified individual must:
   a) Conduct sound level surveys as needed;
   b) Use a dosimeter to determine individual sound level exposure over an eight hour day;
   c) Ensure that audiometric tests are performed upon employees when the sound level in an area equals or exceeds the action level;
   d) Use and calibrate sound level equipment according to manufacturer's specifications;
   e) Allow affected employees to observe noise measurements; and
   f) Notify each employee exposed to an eight hour TWA (or above) of the results of the monitoring.

B. Permissible noise levels

Duration per day/hours	Sound level dBA slow response
8	90
6	92
4	95
3	97
2	100
1.5	102
1	105
.5	110
.25 or less	115

1. Continuous, intermittent, and impulsive sound levels from 80 decibels to 130 decibels must be integrated into the noise measurements.

2. Exposure to impulsive or impact noise must not exceed 140 peak dBA.

C. Audiometric monitoring
1. The safety administrator/designee and the employee's supervisor coordinate annual audiometric monitoring.

2. The facility or work unit's contracted health care provider performs the audiometric tests, using an audiologist, otolaryngologist, or other physician/technician licensed and certified by the Council of Accreditation in Occupational Hearing Conservation.

3. The facility safety administrator ensures that a valid baseline audiogram is established within six months of an employee's first action level exposure.

4. An employee receiving an audiogram during the workday must wear hearing protection prior to his/her test and avoid high levels of non-occupational noise exposure during the 14-hour period immediately preceding the audiometric examination.

5. The facility or work unit's contracted health care provider examines each employee's audiogram to determine the occurrence of a standard threshold shift relative to the baseline and inform the employee of the result.

6. When a standard threshold shift occurs, the facility safety administrator/designee:
   a) Ensures that all employees are equipped, trained, and required to use hearing protection;
   b) Ensures that employees already using hearing protection are refitted, retrained, and provided with hearing protection offering greater attenuation if necessary;
   c) Refers the employee for a clinical audiological evaluation or an otological examination as appropriate;
   d) Informs the employee of the need for an otological examination if a medical pathology of the ear, unrelated to the use of hearing protection, is suspected; and
   e) Records a standard threshold shift of 10dB or more at 2000, 3000 and 4000 hertz, in either ear, in the OSHA injury/illness log.

7. The facility's contracted health care provider must inform the employee if future audiometric tests indicate that an employee's standard threshold shift is not permanent.

D. Noise monitoring

A qualified individual conducts the following noise measurements:

1. Work area noise measurements at periodic intervals:
   a) When noise levels exceed 80 dBA or impulse noise exceeds 85 dBA;

   b) Upon a change in production processes, equipment, or controls.

2. Annually in offender housing units with at least one measurement taking place during the night time and one measurement taking place during day time:
   a) The annual measurements must be recorded.

   b) Offender housing unit measurements exceeding 70 dBA must be reported to the area supervisor for corrective action.

E. Control measures

1. Engineering controls
   a) The immediate supervisor conducts and documents a hazard assessment of the work area to ensure the effectiveness of engineering controls.

   b) The immediate supervisor ensures that noisy processes or equipment are replaced or enclosed, if possible.

2. Administrative controls
   a) When practical, supervisors must rotate employees to limit the time spent in loud environments.

b) When possible, supervisors must provide employees with quiet areas below 70 dBA.

3. Personal protective equipment (PPE)

a) The safety administrator/designee and the area supervisor must conduct a hazard assessment in each area to determine required hearing protection.

b) The safety administrator/designee ensures that employees exposed to an action level receive hearing protection at no cost to the employee. The facility replaces hearing protection as necessary.

c) Hearing protection must be worn by anyone working in the vicinity of:

(1) Operating any gas/diesel power engine (except cars or trucks);
(2) Running emergency generator or fire pump;
(3) Operating lawn equipment (e.g. mowers, weed whips, and leaf blowers);
(4) Operating bobcats, front end loaders, tractors, and snowblowers;
(5) Weapons training,
(6) Operating noisy hand equipment such as hand tools, saws, planners, shears, and presses, and
(7) Any other areas where a hazard assessment indicates hearing protection is required.

d) The facility or work unit must provide a variety of suitable hearing protection for employees to choose.

e) Supervisors must ensure initial fitting and correct use of all hearing protection.

f) The safety administrator/designee ensures that hearing protection is designed to attenuate employee exposure to the permissible exposure limit.

g) When employees have experienced a standard threshold shift, the safety administrator/designee ensures that hearing protection attenuates employee exposure to the action level or below.

h) Employees must not wear radio headphones (e.g. Mp3 headphones) while operating any power equipment.

F. Training

1. Supervisors must ensure that an employee participating in the hearing conservation program is trained annually on:

a) The effects of noise on hearing;
b) The function and characteristics of various types of hearing protectors;
c) Instructions on selection, fitting, use and care of hearing protectors; and
d) Audiometric testing purpose and procedure.
e) Hearing conservation training is documented in the training management system (TMS).

2. The safety administrator/designee must post a copy of OSHA Standard 29CFR 1910.95 in the work place.

G. Record keeping

1. The facility or work unit human resource unit retains all employee audiometric test records including:
   a) Name and job classification of the employee;
   b) Date of the audiogram;
   c) Examiner's name;
   d) Date of the last acoustic calibration of the audiometer;
   e) The employee's most recent noise exposure assessment; and
   f) An accurate record of the measurements of the background sound pressure levels in audiometer test rooms.

2. Facility or work unit human resource unit retains audiometric test records for the duration of the affected employee's employment.

3. The safety administrator/designee retains noise level monitoring records for a minimum of two years.

4. The training unit retains staff training records pertaining to hearing conservation for a minimum of three years.

INTERNAL CONTROLS:

A. Records of annual audiometric exams are retained by human resources.

B. Noise-level monitoring records are maintained by the safety administrator.

C. Hearing conservation training is documented and retained electronically in TMS.

ACA STANDARDS: 4-4150

REFERENCES: Occupational Safety and Health Administration (OSHA) Standard 29 CFR 1910.95
29 CFR 1910.132, "Personal Protective Equipment for General Industry"
Policy 105.113, "Personal Protective Equipment (PPE)"
MN OSHA Chapter 5206, "Right to Know"

REPLACES: Policy 105.114, "Hearing Conservation Program," 10/18/16.
All facility policies, division directives, instructions, memos or other communications whether verbal, written or transmitted by electronic means regarding this topic.

ATTACHMENTS: None

APPROVALS:
Deputy Commissioner, Facility Services
Deputy Commissioner, Community Services
Assistant Commissioner, Operations Support
Assistant Commissioner, Facility Services