Personnel 2-20-17

17-0191

RESOLUTION

HEARING CONSERVATION PROGRAM POLICY FOR EMPLOYEES

WHEREAS, the City of Manitowoc is committed to provide a safe and healthy work environment for all employees, including compliance with OSHA standards; and

WHEREAS, compliance with OSHA standards for employees requires the City adopt a hearing conservation program, which involves employee training, identifying and reducing employees' typical exposures to workplace noise and annually assess the hearing of employees for early detection and progression of hearing loss; and

WHEREAS, at a meeting held on February 6th, 2017 the Personnel Committee recommended that the City adopt a Hearing Conservation Program Policy, which involves employee training, identifying and reducing employees' typical exposures to workplace noise and annually assess the hearing of employees for early detection and progression of hearing loss; and

NOW THEREFORE BE IT RESOLVED, by the Mayor and Common Council of the City of Manitowoc that the Human Resources Department is authorized to administer the attached Hearing Conservation Program Policy.

INTRODUCED FEB 2 0 2017 _____

ADOPTED _____ _____

APPROVED _____ _____

_____

Justin M. Nickels, Mayor

This resolution was drafted by Kathleen M. McDaniel, City Attorney

Fiscal Impact: n/a
Funding Source: n/a
Finance Director Approval: /sc
Approved as to form: /kmm

CITY OF MANITOWOC
HEARING CONSERVATION PROGRAM POLICY

I. GENERAL INFORMATION

The City of Manitowoc is committed to providing a safe and healthy work environment for all our employees. In addition, the City of Manitowoc's goal is to comply with the OSHA standards 29 CFR 1910.95 and 29 CFR 1904.10, incorporated by reference in SPS 332.15 for Public Employee Safety and Health.

PURPOSE

The purpose of this hearing conservation program is to:

- Identify employees whose typical exposure to workplace noise equals or exceeds the action level as set by OSHA, or a level equivalent to a continuous 8-hour exposure to 85 dB(A).
- Identify work areas and tasks in which the sound level is sufficiently high enough to contribute substantially to an exposure at the level described above.
- Reduce workplace exposure to noise through the use of hearing protection devices (ear plugs or ear muffs).
- Annually assess the hearing of employees, in order to detect very early noise-induced hearing loss, so that the progressive loss can be halted.

Ensure that all employees are trained in the effects of excess noise on human hearing, and that each employee is informed on the correct use of hearing protection devices.

II. ADMINISTRATION

The City of Manitowoc's Human Resources department is responsible for administering the hearing conservation program. These responsibilities will include:

- Monitoring noise levels in order to determine employee exposure to noise.
- Administering the audiometric testing program.
- Providing annual training for employees.
- Maintaining noise exposure monitoring, audiometric testing and training records.
- Reviewing the effectiveness of the hearing conservation program and making sure that it satisfies the requirements of all applicable federal, state or local hearing conservation requirements.

Employees are responsible for the following aspects of the hearing conservation program:

- Wearing hearing protection in work areas requiring it.
- Knowledge and understanding of the consequences associated with not following The City of Manitowoc's policy concerning the proper use of hearing protection.
- Proper care of hearing protection, including proper use, routine care and cleaning, storage, and replacement.

III. MONITORING

Noise exposure monitoring will be conducted using the following methods:

- **Area monitoring:** Measuring the noise levels in an area by use of a sound-level meter.

- **Personal monitoring:** Measuring an employee's noise exposure by use of a dosimeter. A dosimeter is worn by an employee in order to evaluate noise levels that the employee is exposed to when doing their job.

IV. AUDIOMETRIC TESTING PROGRAM

The purpose of audiometric testing is to evaluate each employee's hearing threshold by determining the employee's response to noise at several frequencies. The initial audiogram will be used as a baseline measurement to which all subsequent audiograms will be compared. Audiometric testing will be completed annually for all employees whose exposures equal or exceed an 8-hour TWA of 85 dBA.

The audiometric testing will be performed at no cost to the employee.

During the 14 hours prior to the testing, the employees shall refrain from any noisy work or non-work exposures.

The annual audiogram will be compared to the baseline audiogram to determine if the audiogram is valid and if a standard threshold shift (STS) has occurred. An STS is defined as the average hearing loss of 10 dB or more at the tested frequencies of 2,000, 3,000 and 4,000 Hz in either ear.

If an audiogram shows an employee has a STS, the employee may be retested within 30 days to determine if the shift is persistent.

The following steps will be taken if a comparison of the baseline audiogram indicates a persistent standard threshold shift.

1. Employees not using hearing protection will be trained, fitted, and required to use hearing protectors per city policy.
2. Employees already using hearing protectors will be retrained, refitted, and required to use hearing protectors.
3. Written notification of the permanent STS will be given to the employee within 21 days with a copy to the supervisor.
4. The employee will be counseled on the need to use hearing protection and provided further clinical evaluation if necessary.

Evaluation of the results of the audiograms will be performed by the testing agency. The City of Manitowoc will follow all recommendations made for each employee by the tester.

All City of Manitowoc affected employees identified as part of this program shall have an audiogram conducted just prior to termination of the employment relationship (e.g., retirement) or permanent transfer to an area or city department not subject to this policy (NOTE: Preferably on their last day of employment or before transfer). The annual audiogram shall not be used a substitute for the "exit" audiogram.

V. HEARING PROTECTION

Employees included in the hearing conservation program will be provided hearing protection as follows:

- Hearing protection will be provided at no cost to employees
- Employees will be able to select their hearing protection from a variety of suitable hearing protectors
- Employees will receive training in the use and care of hearing protection
- The use of hearing protection will be required for employees who have not yet had a baseline audiogram, who have experienced an STS, or whose exposures exceed an 8-hour TWA of 90 dBA.
- Hearing protection will properly attenuate noise to 90 dBA or lower and 85 dBA or lower for those who have had an STS.

VI. EMPLOYEE TRAINING

Employees included in the hearing conservation program will receive the following annual training:

- The effects of noise on the human ear and hearing
- The purpose of hearing protection, including the advantages and disadvantages of various types of hearing protection
- The proper selection, fitting, use and care of hearing protection
- The purpose and value of noise exposure monitoring and audiometric testing and a summary of the procedures
- The company's and employees' respective tasks for maintaining noise controls

VII. RECORDKEEPING

The City of Manitowoc's program coordinator will maintain records pertaining to the hearing conservation program in a confidential manner. Any requests for records should be directed to him or her. The program coordinator will keep the following records:

- Noise exposure monitoring results
- Audiometric testing records
- Training records

VIII. DEPARTMENT SPECIFIC RULES

1. Fire Department- Fire Fighters are to wear provided headsets/hearing protection as required when riding in the apparatus vehicles. Also, vehicle windows are to remain closed when responding to calls.

2. Police Department-Required to have double protection (both plugs and muffs) when shooting at the indoor range. In addition, squad windows are to remain closed when responding to calls.

HEARING CONSERVATION PROGRAM

NOISE EXPOSURE MEASUREMENT EVALUATION REPORT

City/Village: Manitowoc Department: Police Department

Evaluator: Ben Rank, CVMIC Report Date: 11/30/16

Sampling Equipment Specifications

Description: EXTECH Sound Level Meter Make: EXTECH

Model: 407732 Serial Number: 11106498 dB Range: 35 dB – 130 dB

Calibration Date: 9/23/16 Pre Use Setting: 94 dB Post Use Setting: 94 dB

Sample Collection Settings

Power: Battery: OK Response: SLOW Weighting: A

IX. AREA/EQUIPMENT	X. dBA Level	XI. Notes/Remarks
Squad #57 Explorer	129	Wail siren-Outside of Vehicle (front)
	129	Yelp siren-Outside of Vehicle (front)
	118	Hi/Lo siren-Outside of Vehicle (front)
Compressor in garage bay	83	
H&K G36 Rifle (.223 Practice Round)	112	Indoor Range-shooter position
H&K G36 Rifle (.223 Duty Round)	114	Indoor Range-shooter position
Glock Model 22 (.40 Practice Round)	114	Indoor Range-shooter position
Glock Model 22 (.40 Duty Round)	118	Indoor Range-shooter position
H&K G36 Rifle (.223 Practice Round)	86	Outdoor Range-shooter position
H&K G36 Rifle (.223 Duty Round)	87	Outdoor Range-shooter position
Glock Model 22 (.40 Practice Round)	83	Outdoor Range-shooter position
Glock Model 22 (.40 Duty Round)	87	Outdoor Range-shooter position

HEARING CONSERVATION PROGRAM

NOISE EXPOSURE MEASUREMENT EVALUATION REPORT

City/Village: Manitowoc Department: DPW

Evaluator: Ben Rank, CVMIC Report Date: 3/18/16

Sampling Equipment Specifications

Description: EXTECH Sound Level Meter Make: EXTECH

Model: 407732 Serial Number: 11106498 dB Range: 35 dB – 130 dB

Calibration Date: 3/16/16 Pre Use Setting: 94 dB _____ Post Use Setting: 94 dB _____

Sample Collection Settings

Power: Battery: OK Response: SLOW Weighting: A

XII. AREA/EQUIPMENT	XIII. dBA Level	XIV. Notes/Remarks
#125 Elgin Sweeper	93	Outside brushes running
	81	Inside cab-windows closed
	83	Inside cab-windows closed-operating/driving
#78 Dump Truck	78	Outside idling
	87	Outside high RPM
	70	Driving inside cab windows up
#54 Jetter Truck	84	Outside front of vehicle
	92	Outside by auxiliary engine running
	74	Inside cab with auxiliary engine running windows up
#120 Vacuum Sweeper	98	Outside cab maximum RPM
	93	Outside normal operating
	69	Driving inside cab normal operating windows up
	73	Driving inside cab maximum RPM windows up
#76 Dump Truck	84	Outside cab idling
	77	Inside cab driving
#91 Loader	75	Outside idle
	58	Inside cab idle windows closed
	66	Inside cab operating RPM
#249 Stihl TS 400 Cut Off Saw	94	Idling
	100	Max RPM cutting concrete

#93 Backhoe/Loader	77	Outside cab idling
	67	Inside cab idling windows closed
With Breaker Attachment	112	Outside cab near breaker-operating
	102	Inside cab with window open-operator position
#90 Loader	79	Outside idle
	61	Inside cab idle windows up
	70	Inside cab operating RPM windows up
#107 Trackless Plow	86	Outside cab idle
	77	Inside cab idle windows up
	77	Inside cab maximum RPM windows up
	78	Driving windows up
#53 Vac Truck	81	Idle Outside
	96	Operator position cleaning pit
Mechanic Bay-Tire Cheater	99	Maximum air burst
Air Compressor	79	Running at floor next
Tire Machine	89	Running w/o compressor
	93	Running w/ compressor
Bench Grinder	94	Grinding metal
Blowing compressed air	87	Maximum pressure
½-inch Impact wrench	99	Removal
	99	Tighten
Air Chisel	101	On metal
Tar Kettle	95/100	Back of trailer / front man

HEARING CONSERVATION PROGRAM

NOISE EXPOSURE MEASUREMENT EVALUATION REPORT

City/Village: Manitowoc Department: Library

Evaluator: Ben Rank, CVMIC Report Date: 6/29/16

Sampling Equipment Specifications

Description: EXTECH Sound Level Meter Make: EXTECH

Model: 407732 Serial Number: 11106498 dB Range: 35 dB – 130 dB

Calibration Date: _____ Pre Use Setting: 94 dB _____ Post Use Setting: 94 dB _____

Sample Collection Settings

Power: Battery: OK Response: SLOW Weighting: A

XV. AREA/EQUIPMENT	XVI. dBA Level	XVII. Notes/Remarks
Book Handler	68	Hallway
	63	Front Book Drop
	75	Impact Book Dropping
	67	Counter Area

HEARING CONSERVATION PROGRAM
NOISE EXPOSURE MEASUREMENT EVALUATION REPORT

City/Village: Manitowoc Department: Building and Grounds

Evaluator: Ben Rank, CVMIC Report Date: 11/30/16

Sampling Equipment Specifications

Description: EXTECH Sound Level Meter Make: EXTECH

Model: 407732 Serial Number: 11106498 dB Range: 35 dB – 130 dB

Calibration Date: 9/23/16 Pre Use Setting: 94 dB Post Use Setting: 94 dB

Sample Collection Settings

Power: Battery: OK Response: SLOW Weighting: A

XVIII. AREA/EQUIPMENT	XIX. dBA Level	XX. Notes/Remarks
4-inch Angle Grinder	102	Grinding Metal
Bostitch Pneumatic Nailer	91	Nailing Wood
Delta Table Saw	85	Cutting ¾-inch plywood
Dewalt 10-inch Miter Saw	99	Cutting ¾-inch plywood
Key Machine	92	Cutting metal Key
Pedestal Grinder	97	Grinding Metal

HEARING CONSERVATION PROGRAM

NOISE EXPOSURE MEASUREMENT EVALUATION REPORT

City/Village: Manitowoc Department: Rahr West

Evaluator: Ben Rank, CVMIC Report Date: 11/30/16

Sampling Equipment Specifications

Description: EXTECH Sound Level Meter Make: EXTECH

Model: 407732 Serial Number: 11106498 dB Range: 35 dB – 130 dB

Calibration Date: 9/23/16 Pre Use Setting: 94 dB _____ Post Use Setting: 94 dB _____

Sample Collection Settings

Power: Battery: OK Response: SLOW Weighting: A

XXI. AREA/EQUIPMENT	XXII. dBA Level	XXIII. Notes/Remarks
Portable Pancake Compressor	96	Running while blowing air

HEARING CONSERVATION PROGRAM
NOISE EXPOSURE MEASUREMENT EVALUATION REPORT

City/Village: Manitowoc Department: Fire Department

Evaluator: Ben Rank, CVMIC Report Date: 11/30/16

Sampling Equipment Specifications

Description: EXTECH Sound Level Meter Make: EXTECH

Model: 407732 Serial Number: 11106498 dB Range: 35 dB – 130 dB

Calibration Date: 9/23/16 Pre Use Setting: 94 dB Post Use Setting: 94 dB

Sample Collection Settings

Power: Battery: OK Response: SLOW Weighting: A

XXIV. AREA/EQUIPMENT	XXV. dBA Level	XXVI. Notes/Remarks
Bauer Compressor	91	Air Bleed-off
	87	Compressor Running
Stihl MS460 Rescue Saw	88	Idle
	108	Full RPM
Stihl TS360 Cut off Saw	91	Idle
	103	Full RPM
Partner Saw K950	87	Idle
	104	Full RPM
Power Vent Fan Honda GX 160	92	Idle
	101	Full RPM
Hurst Hydraulic Pump-Engine #1	89	Idle
	90	Full RPM
Air Hammer (Pneumatic)-Engine #1	108	Hammering Metal
Stihl MS260 Saw	89	Idle
	108	Full RPM
Engine #1 Pump	80	Idle Operator Position
	86	Full RPM Operator Position
Ladder #1	84	Idle by Pump Panel
	92	Pump Full RPM by Pump Panel

Cutter's Edge Rescue Saw	90	Idle
	118	Full RPM
Honda EM50002 Generator	96	Running
Winco Portable Generator	94	Full RPM

HEARING CONSERVATION PROGRAM
EXPOSURE MEASUREMENT EVALUATION

I. City/Village: City of Manitowoc

II. Department: **Wastewater Treatment Facility**

Sampled By: Dave Kodel, Cities & Villages Mutual Insurance Co.

Date: April 3, 2001

Date Calibrated: April 3, 2001

Sampling Device: Quest Technologies Q-300 Noise Dosimeter

XXVII. AREA/EQUIPMENT	XXVIII. dBA Level	XXIX. NOTES/REMARKS
Primary Sludge Pump	101 dBA	Highest noise level recorded in this area.
Pump in Basement of Bldg.	89 dBA	Highest noise level recorded in this area.
Pump in Basement of Bldg.	96 dBA	Noise level when shutting down and the lines pressure blowing off.
Stack Filter Pumps	79 dBA	Highest noise level recorded in this area.
Boiler Room	87 dBA – 93.5 dBA	Noise range encountered in this room – varies depending on where you are standing.
Air Blower for the Air Scourer Blower	90 dBA – 93 dBA	Short monitoring time – relief valve blew off quickly.
Air Blower for the Air Scourer Blower	118 dBA	Highest noise level when the relief valve blew off.
T-Building Basement	92 dBA	Highest noise level recorded in this area.

HEARING CONSERVATION PROGRAM

NOISE EXPOSURE MEASUREMENT EVALUATION REPORT

City/Village: Manitowoc Department: Parks

Evaluator: Ben Rank, CVMIC Report Date: 7/27/16

Sampling Equipment Specifications

Description: EXTECH Sound Level Meter Make: EXTECH

Model: 407732 Serial Number: 11106498 dB Range: 35 dB – 130 dB

Calibration Date: 6/15/16 Pre Use Setting: 94 dB Post Use Setting: 94 dB

Sample Collection Settings

Power: Battery: OK Response: SLOW Weighting: A

XXX. AREA/EQUIPMENT	XXXI. dBA Level	XXXII. Notes/Remarks
Stihl MS441 Chainsaw	95	Idle
	115	Max RPM
Walk Behind Leaf Blower 8HP	88	Idle-operator position
	100	Max RPM-operator position
Stihl KM110R Trimmer/Hedger	85	Idle
	99	Max RPM
Stihl BG86 Hand Leaf Blower	78	Idle
	99	Max RPM
Bobcat #691	82	Idle-in cab front open
	92	Max RPM-in cab front open
Lawn Boy Mower	95	Running RPM-operator position
Nissan 50 Forklift	60	Idle-Operator position
	85	Maximum RPM operator position
Vermeer Chipper	84	Idle-operator position
	101	Max RPM not chipping
	112	Max RPM chipping 5-inch log
John Deere Riding Mower #669	82	Idle-operator position
	101	Max RPM blades running-operator position
Trackless Plow	80	Idle-Inside Cab windows up

	82	Idle-Inside Cab windows up
Hand Grinder (in shop)	100	Lawn mower blade sharpening