PERSONAL PROTECTIVE EQUIPMENT

Personal Protective Equipment (PPE)

1. PPE includes all clothing and other work accessories designed to create a barrier against workplace hazards.
2. Using PPE requires hazard awareness and training on the part of the user.
    - Employees must be aware that the equipment does not eliminate the hazard.
    - If the equipment fails, the employee is exposed to the hazard.
    - To reduce the possibility of failure, equipment must be properly fitting and maintained in a clean and serviceable condition.
3. PPE devices alone should not be relied on to provide protection against hazards, but shall be used in conjunction with guards, engineering controls, and sound manufacturing practices.
    - The first obligation of the City of Portage will be to eliminate the hazard when it is feasible.
4. The City of Portage will assess the workplace to determine if hazards are present, or are likely to be present, which necessitate the use of PPE.
    - If such hazards are present, or likely to be present, the City of Portage will:
        a. Select, and have each affected employee use, the types of PPE that will protect the affected employee from the hazards identified in the hazard assessment.
        b. Communicate selection decisions to each affected employee.
        c. Select PPE that properly fits each affected employee.
5. The City of Portage will verify that the required workplace hazard assessment has been performed through a written certification that identifies:
    - The workplace evaluated.
    - The person certifying that the evaluation has been performed.
    - The date(s) of the hazard assessment.
    - Identifies the document as a certification of hazard assessment.
6. After completion of the hazard assessment, the general procedure for selection of protective equipment is to:
    - Become familiar with the potential hazards and the type of protective equipment that is available and what it can do.
        a. Splash protection, impact protection, etc.
    - Compare the hazards associated with the environment.
        a. Impact velocities, masses, projectile shape, radiation intensities, with the capabilities of the available protective equipment.
    - Select the protective equipment which ensures a level of protection greater than the minimum required to protect employees from the hazards.
    - Fit the user with the protective device and give instructions on care and use of the PPE.
        a. It is very important that the end users be made aware of all warning labels for any limitations of their PPE.
7. Careful consideration must be given to comfort and fit.
    - PPE that fits poorly will not afford the necessary protection.

- Continued wearing of the device is more likely if it fits the wearer comfortably.
- Care should be taken to ensure that the right size is selected.

8. Adjustments should be made on an individual basis for a comfortable fit that will maintain the protective device in the proper position.

    - Particular care should be taken in fitting devices for eye protection against dust and chemical splash to ensure that the devices are sealed to the face.
    - Proper fitting of helmets is important to ensure that it will not fall off during work operations.
        a. Chin straps may be necessary to keep the helmets on an employee's head.

9. Personal protective equipment that has been previously used should be disinfected before being issued to another employee.
10. It is always necessary to reassess the workplace hazard situation as necessary, by identifying and evaluating new equipment and processes, reviewing accident records, and reevaluating the suitability of previously selected PPE.

HEAD PROTECTION

Protective helmets purchased prior to July 5, 1994 must comply with the ANSI Z89.1-1969, "American National Standard Safety Requirements for Industrial Head Protection", and ANSI Z89.2-1971, "Requirements for Industrial Protective Helmets for Electrical Workers".

Protective helmets purchased after July 5, 1994 must comply with ANSI Z89.1-1986, "American National Standard for Personnel Protection – Protective Headwear for Industrial Workers Requirements".

1. Each type and class of head protector is intended to provide protection against specific hazardous conditions.

    - Type 1 – helmets with a full brim
    - Type 2 – helmets with no brim, but may include a peak

2. For industrial purposes, three classes are recognized:

    - Class A – general service, limited voltage protection
    - Class B – utility service, high-voltage protection
    - Class C – special service, no voltage protection

3. The wearer should be able to identify the type of helmet by looking inside the shell for the manufacturer, ANSI designation and class.

General Procedures

1. Employees working in areas where there is a possible danger of head injury from impact, or from falling or flying objects, or from electrical shock and burns, shall be protected by protective helmets. Employees are required to wear helmets when:

    - Working below other workers who are using tools and materials that could fall.
    - Working below machinery or processes that might cause material or objects to fall.
    - Working in excavations and manholes.
    - Working on exposed energized conductors.

2. Manufacturers should be consulted with regards to paint or cleaning materials for their helmets because some paints and thinners may damage the shell and reduce protection by physically weakening it or negating electrical resistance.

3. A common method of cleaning helmets is scrubbing with a mild detergent and rinsed in clear water approximately 60ºC (140ºF).
    - After rinsing, the shell should be carefully inspected for any signs of damage.
4. Removal of tars, paints, oils, and other materials may require the use of a solvent, the manufacturer of the helmet should be consulted with regards to an acceptable solvent.

SAFETY CHECK: All components, shells, suspensions, headbands, sweatbands, and any accessories should be visually inspected daily for signs of dents, cracks, penetration, or any other damage that might reduce the degree of safety originally provided.

5. If unusual conditions occur with helmets (such as higher or lower extreme temperatures than described in the standards), or if there are signs of abuse or mutilation of the helmet or any component, the margin of safety may be reduced.
    - If damage is suspected, the helmets should be replaced.
6. Helmets should not be stored or carried on the rear window shelf of an automobile, since sunlight and extreme heat may adversely affect the degree of protection.

EYE AND FACE PROTECTION

Suitable eye protectors must be provided where there is a potential for injury to the eyes or face from flying particles, molten metal, liquid chemicals, acids or caustic liquids, chemical gases or vapors, potentially injurious light radiation or a combination of these.

General procedures

1. Employers must provide a type of protector suitable for work to be performed, and employees must use the protectors.
2. Each affected employee shall use eye protection that provides side protection when there is a hazard from flying objects.
3. Each affected employee who wears prescription lenses while engaged in operations that involve eye hazards shall wear eye protection that incorporates the prescription in its design, or shall wear eye protection that can be worn over the prescription lenses without disturbing the proper position of the prescription lenses or the protective lenses.
    - Persons who use corrective spectacles and are required to wear eye protection should wear the following:
        a. Spectacles with protective lenses providing optical correction.
        b. Goggles or face shields worn over corrective spectacles without disturbing the adjustment of the spectacles.
        c. Goggles that incorporate corrective lenses mounted behind the protective lenses.
4. Protectors must meet the following minimum requirements:
    - Provide adequate protection against the particular hazards for which they are designed.
    - Be reasonable comfortable when worn under the designated conditions.
    - Fit snugly without interfering with the movements of vision of the wearer.
    - Be durable.
    - Be capable of being disinfected.
    - Be easily cleanable.
    - Be kept clean and in good repair.
5. Every protector shall be distinctly marked to facilitate identification of the manufacturer.

6. When limitations or precautions are indicated by the manufacturer, they should be communicated to the user and strictly observed.
7. Fitting of goggles and safety spectacles should be done by someone skilled in the procedure.
    - Prescription safety spectacles should be fitted only by qualified optical personnel.
8. Each affected employee shall use equipment with filter lenses that have a shade number appropriate for the work being performed for protection from injurious light radiation.
9. It is essential that the lens of the eye protectors be kept clean.
    - Continuous vision through dirty lenses can cause eye strain.

SAFETY CHECK: Daily inspection and cleaning of the eye protector with soap and hot water, or with a cleaning solution and tissue, is recommended.

10. Lenses should be replaced when they are pitted and deeply scratches.
11. Visual inspection of headbands should be performed daily.
    - Slack, worn-out, seat-soaked, twisted headbands or headband loss of elasticity will not hold the eye protector in proper position.
12. Employees shall be provided with all inspections packaged with protection devices.

FOOT PROTECTION

Protective footwear purchased prior to July 5, 1994 must comply with the ANSI standard, "USA Standard for Men's Safety-Toe Footwear", Z41.1-1967, and protective footwear purchased after July 5, 1994 shall comply with ANSI Z41-1991, "American National Standard for Personal Protection – Protective Footwear".

Safety shoes and boots which meet the ANSI Z41-1991 Standard provide both impact and compression protection.

General Procedures

1. Each affected employee shall wear footwear when working in areas where there is a danger of foot injuries due to falling and rolling objects, or objects piercing the sole, and where such employee's feet are exposed to electrical hazards.
2. Safety shoes or boots with impact protection would be required for:
    - Carrying or handling materials such as packages, objects, water meters, parts or heavy tools that could be dropped.
    - Loading tools, material and equipment onto trucks.
    - Working around moving equipment.
    - For other activities where objects might fall onto the feet.
3. Safety shoes or boots with compression protection would be required for:
    - Work activities involving skid trucks (manual material handling carts), equipment movement, lawn maintenance equipment and around heavy pipes, all which could potentially roll over an employee's feet.
4. Safety shoes or boots with puncture protection would be required:
    - Where sharp objects such as nails, wire, tacks, screws, large staples, scrap metal, etc. could be stepped on by employees causing a foot injury.

SAFETY VEST

Employees who work on highways, roads, streets or their easements shall wear ANSI-approved reflective traffic safety vests or use clothing or equipment that provides equivalent protection.

Flaggers

1. According to the Manual on Uniform Traffic Control Devices, U.S. Department of Transportation, a flagger should possess the following minimum qualifications:
    - Average intelligence.
    - Good physical condition, including sight and hear.
    - Mental alertness.
    - Courteous, but firm manner.
    - Neat appearance.
    - Sense of responsibility for safety of public and crew.
2. The use of ANSI-approved reflective clothing such as a vest, shirt, or jacket shall be required for flaggers.
    - For nighttime conditions similar outside garments shall be reflectorized.
    - The reflective material shall be either, orange, white (including silver-colored reflecting coatings or elements that reflect white light), yellow, fluorescent red-orange or fluorescent yellow-orange.

HEARING CONSERVATION PROGRAM

It is the policy of the City of Portage to institute an occupational hearing conservation program to prevent any temporary or permanent noise-induced hearing loss to employees, and to comply with 29 CFR 1910.95 Occupational Noise Exposure.

Monitoring Procedures

1. The City of Portage Insurance Carrier will monitor and identify workplace noise levels using a calibrated sound level meter. (See Appendix 1)
    - Monitoring shall be repeated whenever a change in protection, process, equipment or controls increases noise exposures to the extent that:
        a. Additional employees may be exposed at or above the action level.
        b. The attenuation provided by hearing protectors being used by employees may be rendered inadequate to meet the requirements.
2. Employees will be notified of upcoming equipment purchases or modifications which may affect sound levels.
3. Warning signs will be posted in conspicuous locations near the high noise level areas to ensure that hearing protection is required when operating machinery.
4. Employees will be given the opportunity to observe any noise measurements in the hearing conservation program.

Employee Notification

The City of Portage shall notify each employee exposed at or above 85 decibels of the results of the monitoring.

All employees will recognize 85 Decibels (dB) – as the "Action Level" where hearing protection is required.

Audiometric Testing

1. The city of Portage will provide audiometric testing at no cost to every employee in the hearing conservation program.

- Testing shall be done at a pre-placement physical, on a regular annual basis, whenever production of maintenance operations change that result in increased noise levels, in employee job transfer situations into or out of a department in the hearing conservation program, and because of termination or layoff situations.

2. 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, or by other qualified individual.
3. Employees shall be informed prior to their scheduled testing.
    - Employees must have 14 hours of non-exposure to workplace noise, prior to the actual testing.
    - Protective hearing equipment may be substituted for the necessary waiting period.
4. At least annually after obtaining the baseline audiogram, the City of Portage shall obtain a new audiogram for each employee exposed at or above an 8-hour time-weighted average of 85 decibels.
5. If a comparison of the annual audiogram to the previous audiogram indicates a standard threshold shift, the employee shall be informed of this fact in writing, within 21 days of the test results.

Hearing Protectors

1. The City of Portage shall make hearing protectors available to all employees exposed to an 8-hour time-weighted average of 85 decibels or greater at no cost to the employees.
    - Hearing protectors shall be replaced as necessary.
2. The department supervisor shall ensure that hearing protectors are worn.
    - By any employee who is required to wear personal protective equipment under the hearing conservation program.
    - By any employee who is exposed to an 8-hour time-weighted average of 85 decibels or greater.
    - By any employee who has not yet received their baseline audiogram or who has experienced a standard threshold shift.
3. Employees shall be given the opportunity to select their hearing protectors from a variety of suitable hearing protectors provided by the City of Portage.
4. The City of Portage shall ensure proper initial fitting and each supervisor shall ensure the correct use of all hearing protectors.

Training

1. The City of Portage shall institute a training program for all employees who are exposed to noise at or above an 8-hour time-weighted average of 85 decibels, and shall ensure employee participation in such program.
2. The training program shall be repeated annually for each employee included in the hearing conservation program.
3. The City of Portage shall ensure that each employee is informed of the following:
    - The effects of noise on hearing.
    - The purpose of hearing protectors, the advantages, disadvantages, and attenuation of various types, and instructions on selection, fitting, use, and care.
    - The purpose of audiometric testing, and an explanation of the test procedures.
    - Copy of the standard to be included in the employee training.

Records

1. The department supervisor shall maintain accurate records for all noise level surveys and employee exposures. Noise exposure records will be kept at a minimum of 2 years.
2. Employee's baseline/annual audiogram and any other records shall be retained in a separate file at the City Administrator's office, City Hall, 115 W. Pleasant Street, for the duration of the employment plus 30 years after termination including measurements.
3. Noise exposure records will be provided to employees, former employees, or designated representatives thereof, upon written request to the City Administrator.

NOTE: All windows should be kept rolled up while responding with sirens on. This will greatly decrease the db level inside the Fire Apparatus and Squad Cars.