PURPOSE:
This guidance document provides Michigan Department of Transportation (MDOT) personnel with a consistent policy regarding the purpose and proper use of Personal Protective Equipment (PPE) and establishes minimum acceptable standards for the wearing of PPE when involved in applicable work and field activities. It applies to all MDOT employees.

INFORMATION:
MDOT requires the use of PPE to protect employees from work-related injuries. MDOT follows Michigan Occupational Safety and Health Administration (MIOSHA) rules and standards for personal protective equipment.

MDOT has the following four basic PPE requirements for employees:

Eye protection, head protection and foot protection must be worn:
- Outdoors while engaging in, inspecting, or observing work activities.
- Indoors in building areas marked as requiring such protection.

Safety vests/high visibility apparel must be worn:
- When performing, inspecting, or observing work within the right-of-way of the road or when performing or inspecting work that would cause the employee to periodically be exposed to vehicle traffic or construction equipment.

Special or specific PPE may also be required for specific tasks or equipment. The Standards and Information section of this guidance document/policy provides additional details and information for basic and special/specific types of PPE.

PPE items (such as safety vests and head protection) are provided to employees by individual work areas that purchase items through the MDOT Central Warehouse. Other PPE items (such as safety footwear and prescription safety glasses) have specific purchase/reimbursement methods.

PROCEDURE:

Responsibility: Action:

Employer: 
1. Implement processes to provide all employees with the appropriate PPE, in accordance with this policy, to safely accomplish each task assigned.
2. Require employees to wear PPE prescribed by this policy and all applicable MIOSHA standards, rules, etc., and good safety practices.
3. Require that equipment worn in direct contact with the skin is sanitized before being reused by others.
PROCEDURE: (continued)

Responsibility: Action:

**Supervisor:**
1. Ensure appropriate PPE is issued and/or obtained by employees for regular and special or specific job duties.
2. Ensure training is provided on the use of PPE.
3. Provide periodic refresher training as needed.
4. Enforce the use of PPE.
5. Review PPE requirements prior to work/tasks.
6. Monitor the condition of PPE and arrange for replacement.
7. Monitor the treatment, cleaning, and storage of PPE.
8. Ensure that work areas in facilities are signed and/or marked as to any specific PPE requirements.
9. Ensure training records and other documents regarding employee training, knowledge, and use of PPE are maintained and kept current.

Failure to carry out these responsibilities may result in disciplinary action.

**Employee:**
1. Be familiar with MDOT PPE requirements and comply with this policy (Guidance Document 10118).
2. Obtain appropriate PPE for routine and/or special/specific job duties.
3. Wear PPE in all designated areas (labs, field activities, etc.) or when otherwise directed or required to do so.
4. Review PPE requirements with supervisor prior to work/tasks.
5. Properly care for, clean, and store assigned PPE.
6. Monitor the condition of assigned PPE and replace as needed.
7. Immediately report to supervisor if PPE is lost or damaged.
8. Consult with supervisor or other appropriate knowledgeable personnel, whenever there are any questions regarding PPE requirements and use.
9. Order prescriptions safety glasses in a timely manner, if applicable, and follow the current ordering process and requirements.

Failure to carry out these responsibilities may result in disciplinary action.
STANDARDS AND INFORMATION:

Eye Protection

1. Safety glasses worn by employees must meet the current American National Standards Institute (ANSI) Z87.1 standards.

2. The use of safety sunglasses is prohibited inside buildings or other areas where there is insufficient lighting. The use of photosensitive lenses for safety glasses is not permitted by MDOT.

3. Eye protection must be worn outdoors while engaging in, inspecting, or observing any work activities, in building areas marked requiring eye protection, and in any activity where there is a chance of an eye injury.

4. Safety glasses must be equipped with permanent or integral side shields to eliminate the possibility of projectiles from entering the sides of the glasses.

5. Depending on the type of work being performed, safety glasses with side shields may not be enough protection. Examples of hazards requiring the use of face shields and/or goggles along with safety glasses with side shields include the following:
   a. Chemical splashes and vapors in areas where chemicals are mixed or poured; and batteries are handled. Safety Data Sheets (SDS) should be consulted for recommendations for proper eye protection.
   b. Flying fragments, large chips, particles, sand, and dirt from work involving chipping, grinding, machining, masonry cutting, blasting, and sanding.
   c. Burns from hot sparks with work involving hot materials, electrical work, gas cutting, or welding.
   d. When grinding, chipping, or cutting, to eliminate any flying fragments from finding an opening into the eye or under regular safety glasses.

6. When cutting or welding metal, welding goggles or a welding helmet with a tinted window must be worn.

7. When performing work involving tree trimming, brush cutting, clearing, and debris pickup, a mesh window can be worn in place of a face shield.

8. Contact the MDOT Safety and Security Administration for current information on the process to purchase prescription safety eyewear.
STANDARDS AND INFORMATION (continued):

**Head Protection**

1. Head protection must be worn outdoors while engaging in, inspecting, or observing work activities; in building areas marked as requiring head protection and by all personnel engaged in any activity where there is a hazard from falling or flying objects, or other harmful contacts, or exposures to head injury.

2. Hard hats do not have to be worn when inside a vehicle, or inside a fully enclosed cab, but must be worn when operating any other equipment.

3. The hard hat must be certified by the manufacturer that it complies with ANSI Standard Z89.1, Type 1.

4. Bump caps (which offer limited protection) are authorized only for mechanic foremen and mechanics while working in shop areas or for employees who work or inspect the inside of bridges in which there is no risk of falling or flying objects.

5. Hard hats must not be deliberately damaged, physically altered, or painted (shell becomes brittle) and must be worn as intended. Hard hats with laminated covers or shells, which fully cover the exterior of the hard hat, shall not be worn.

6. No other headgear may be worn under a safety hard hat which interferes with its proper fit (e.g.: baseball style caps), except for an approved hard hat liner or bandana.

7. Hard hats and internal webbing shall be inspected periodically and replaced as needed.

8. Vented hard hats (rated Class C for conductive) shall not be worn when working with, near, or around electrical equipment.

**Hearing Protection**

1. Employees subjected to loud and prolonged or intense noise levels must wear hearing protection. When operating or working near equipment such as air hammers, chain saws, or any other equipment which is louder than normal city noises, hearing protection must be worn.

2. There are two types of hearing protection provided by MDOT: (1) ear muffs and (2) ear plugs. These protectors are rated by their noise attenuation and expressed as to the amount of decibels that can be reduced (referred to as the Noise Reduction Rating or NRR).

3. For additional hearing protection, ear plugs and ear muffs can be worn together.
NAME: Safety and Security Administration

SUBJECT: Personal Protective Equipment (PPE) Policy

STANDARDS AND INFORMATION (continued):

Hand Protection

1. Hand protection devices are used to protect the hands from cuts, bruises, abrasions, dusts, vapors, moisture, hazardous substances and corrosive liquids. The appropriate gloves should be worn for the task.

2. Loose fitting or gauntlet gloves shall not be worn around equipment which could catch on the glove (i.e., brush chippers, drills, augers, or other rotating/moving pieces of equipment).

3. When working with liquids or doing electrical work, appropriate rubber gloves shall be worn. Electrical work requires rubber insulating gloves and is covered in MIOSHA Construction Standard, Part 6, as to type and testing requirements. Guidance for using rubber/neoprene gloves when handling chemicals can be found in the SDS for the particular substance.

Foot Protection

1. Foot or toe protection is a device such as, but not limited to, safety toe footwear, toe protectors, or foot guards that protect the foot or toes against injury. Safety toe footwear consists of either a steel or composite cap built in the boot.

2. Foot protection must be worn by all personnel engaging in, inspecting, or observing field operations, in building areas requiring foot protection and in any activity where there is a hazard for foot injury.

3. Safety footwear must be 6 inches or higher to allow for ankle support and coverage.

4. Safety footwear shall be labeled as meeting the American Society for Testing and Materials (ASTM) F2413, and have an impact rating of I-75. Older footwear bearing the ANSI Z41 standard is also acceptable.

5. Additional foot protection, such as metatarsal guards, may be required when operating air hammers and other work which could cause injury to other areas of the foot.

6. Safety footwear shall be maintained without holes due to rips or tears which will reduce the intended protection.

7. When a hazard is created by chemicals or other irritants which could cause injury or impairment to the feet by absorption, rubber boots must be worn over the safety footwear. When working with hazardous substances, SDS should be consulted as to any recommendations for foot protection.

8. Exceptions for required foot protection must have written approval from the MDOT Safety and Security Administration based on a complete hazard assessment.
STANDARDS AND INFORMATION (continued):

**Safety Vests and Other High Visibility Apparel**

1. High visibility safety apparel shall be worn by all workers per specifications in the Michigan Manual on Uniform Traffic Control Devices, Temporary Traffic Control (Part 6).

2. Safety vests/high visibility apparel must be worn by all employees when performing, inspecting, or observing work within the right-of-way of the road or when performing or inspecting work that would cause the employee to periodically be exposed to work vehicles or construction equipment.

3. Safety vests must meet the ANSI 107 Class 2 requirements at a minimum.

4. MDOT safety vests have a specific high visibility design with contrasting colors with retroreflective strips and a mesh background material throughout that is to be worn over appropriate clothes.

5. The MDOT Class 2 safety vest is the most common version and shall be worn unless conditions warrant wearing a tear-a-way or Class 3 safety vests.

6. A tear-a-way version of the MDOT Class 2 vest with hook and loop fasteners on the sides and shoulders shall be worn when working around chippers, augers, or other equipment when there is a chance of entanglement.

7. A Class 3 safety vest is also available for use in certain situations, specifically when performing tasks in low light or nighttime situations or when working in close proximity to traffic. Class 3 clothing offers more high-visibility background and retroreflective material than Class 2 clothing. Contact Safety and Security Administration or your supervisor for recommendations when to wear Class 3.

8. Employees are allowed to substitute high visibility T-shirts and outerwear (coats, jackets, etc.) for MDOT issued high visibility Class 2 or Class 3 safety vests. These items must be purchased by employees at their own cost.

9. High visibility T-shirts and outerwear must meet the current ANSI 107 Class 3 requirements. They must have contrasting colors, meaning two-toned with both strong yellow-green and fluorescent orange colors. Employees who use outerwear that does not meet the Class 3 requirements or have the contrasting colors described above must wear a MDOT issued safety vest on the outside of the non-standard garments.
STANDARDS AND INFORMATION (continued):

Clothing Considerations

1. Clothing with a high content of polyester and nylon shall not be worn near a source of flame, spark, hot surface, or material that could ignite or melt the clothing.

2. All employees are required to wear a shirt and full-length pants when involved in field activities.

3. Employees shall not wear clothes such as shorts or cut-offs, skirts, tank tops, halter tops, cut-off or cropped T-shirts, clothes with holes in them, or clothes with flammable materials (oil and grease) on them when involved in field activities.

4. Loose fitting clothes shall not be worn when working with or near machinery.

5. When operating or in close proximity to equipment, jewelry on hands and wrists shall be removed or covered, necklaces tucked in, dangling earrings removed, and long hair pulled back.

6. Employees must wear chain saw chaps or leggings when operating a chain saw, except when operating from a bucket of an aerial lift.

7. When working with hazardous materials, review the SDS for any material to which employees may be exposed to help determine what protective clothing, if any, should be used.

8. When working with chemicals, determine if a special chemical resistant body suit may be required.

9. Generally, it is good to cover as much of the body as possible to protect against scrapes, burns, punctures, or even the harmful effects of the sun.

Respirators

1. Respirators, if required, must be National Institute for Occupational Safety and Health (NIOSH) certified.

2. Respiratory protective devices vary in design, equipment specifications, application, and protection capability. Proper selection depends on the substance involved, conditions of exposure, human capabilities, and equipment fit.

3. Refer to the MDOT Respiratory Protection procedure on the MDOT Safety and Security Administration web page for more detailed information.
STANDARDS AND INFORMATION (continued):

**Fall Protection**

1. Fall protection fall arrest equipment shall be inspected prior to each use.

2. Refer to the MDOT Fall Protection (Fall Arrest Systems) procedure on the MDOT Safety and Security Administration web page for more detailed information.

**Other or Additional PPE**

Other or additional PPE may be required for specific jobs. Employees should review any concerns regarding the appropriateness of the PPE to be used with their supervisor. A PPE assessment may be required to evaluate the job and the type of PPE required. Contact MDOT Safety and Security Administration for assistance in conducting an assessment.

**QUESTIONS:**

Questions regarding this document should be directed to MDOT Safety and Security Administration at 517-241-1697.

Approved: 

\[
\text{Kirk T. Steudle, Director} \quad \text{September 22, 2015}
\]