

Approved:



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Standard Procedure 220-006(SP)

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Responsible Division: Quality & Human Resources

Supersedes: Standard Procedure No.150-003 (SP)

OHIO DEPARTMENT OF TRANSPORTATION SAFETY & HEALTH STANDARD OPERATING PROCEDURE

PROCEDURAL STATEMENT:

Influence, control, and responsibility are the key ingredients to an effective safety program. If one of these items is missing or lacking, the program will fail.

First level supervisors have the most influence on safety. They work directly with employees and are in the best position to observe safety behavior. They can provide positive or negative influence. Positive influence will motivate employees to be aware of safety and work within a safe environment. Negative influence will have a detrimental effect. If first level supervisors do not take an active role in promoting safety, the program will fail.

Management has the most control of safety. The ability to change work methods, enforce safety procedures, or redirect resources lies within their grasp.

Responsibility for safety lies with all employees. The importance of safety must be communicated to all levels on an ongoing basis. Safety is everyone's business.

AUTHORITY:

Federal Occupational Safety & Health Standards 29CFR1910, et seq.

Federal Occupational Safety & Health Standards 29CFR1926, et seq.

Ohio Revised Code Chapter 4167, et seq.

Ohio Administrative Code Chapter 4123 1-3, et seq.

Division of Quality and Human Resources

REFERENCES:

State of Ohio/OCSEA Collective Bargaining Agreement – Article 11 Health & Safety
Ohio Manual of Uniform Traffic Control Devices

SCOPE:

This standard operating procedure is applicable to all Districts, Regions, Divisions, and Offices within the Ohio Department of Transportation.

BACKGROUND AND PURPOSE:

The purpose of this Employee Safety & Health Standard Operating Procedure (SOP) is to establish statewide minimum safety guidelines which are meant to be followed by all employees. The basic content of this SOP has been previously agreed to in Article 11 of the OCSEA contract. Furthermore, these guidelines are intended to establish a minimum level of risk management and techniques for accident/injury avoidance. District management, including safety staff and the District Health & Safety Committee, may impose a higher level of compliance in any area of this SOP based on the degree of hazard.

DEFINITIONS:

BHR or BHRA

Business and Human Resource Administrator

DDD

District Deputy Director

OCSEA

Ohio Civil Service Employees Association

PPE

Personal Protective Equipment

PROCEDURE:

I. Accountability for Safety in the Workplace

All managers and supervisors are responsible for establishing and maintaining a safe working environment for employees under their supervision or control.

All ODOT managers and safety staff are authorized to immediately stop work where employees are exposed to imminent danger of death or physical harm until all necessary safety controls are established.

II. Personal Protective Equipment (PPE) & Life Saving Equipment

The purpose of personal protective equipment is to provide a barrier or shield between employees and chemicals or physical hazards present in the workplace, or to isolate

employees from such hazards. PPE shall be used when hazards cannot be removed or abated by engineering controls. Employees are required to wear personal protective equipment appropriate for tasks they will perform.

A. Hazard Assessment and Personal Protective Equipment Selection

1. Supervision and/or a safety representative shall ensure that:

a. Proper personal protective equipment is selected and used that will protect the affected employee(s) from hazards which cannot be controlled by engineering measures.

b. Approved equipment is purchased by ODOT and used, tested, inspected and properly maintained by the employee.

c. Employees are trained on:

(1) When PPE is necessary.

(2) How to properly adjust and wear PPE.

(3) The limitations of PPE.

(4) The proper care, maintenance, useful life and disposal of the PPE.

d. Retraining is required when:

(1) There is reason to believe that the employee lacks the understanding and/or skill to demonstrate the proper use and care of personal protective equipment

(2) If there are changes in workplace conditions, regulations, or types of PPE used.

B. General PPE Requirements

1. Jewelry is not to be worn by employees working on highway maintenance projects, electrical work, in shops, or with or near moving equipment or rotating parts where the item will constitute a hazard.

2. An employee's hair shall not obstruct the wearing of personal protective equipment.

3. All employees assigned to a contractor controlled job site shall adhere to the personal protective equipment requirements and job site safety plan of either the contractor or ODOT, whichever is more stringent.

III. Head Protection (Hard Hats)

Supervisors shall ensure that all employees wear appropriate head protection when working at or visiting maintenance and construction work site where there is a possible danger of head injuries. All hard hats must meet or exceed ANSI Z89.1-2003 Type 1 Class E - G requirements. Hard hats are not to be painted or altered in any way and shall be worn as intended by the manufacturer. Hard hats must be worn:

- A. When there is a clear and present danger of falling or moving objects.
- B. When exposed to falling or flying material.
- C. When exposed to overhead electrical conductors.
- D. Required hard hat areas include, but are not limited to:
 - 1. Under a Bridge
 - 2. Working near High Voltage Wires
 - 3. Tree/Brush Cutting, Trimming and Chipping
 - 4. In the Proximity of Heavy Equipment
 - 5. Post Installation and Removal
 - 6. Sign Installation and Removal
 - 7. Pile Driving
 - 8. Culvert Jobs
 - 9. Confined Space
 - 10. Trenching
 - 11. Flagging – A high-visibility ball cap meeting ANSI Standard 107-2004 may be substituted and must be purchased by the employee.

Employees shall inspect hard hats for cracks and other signs of damage or deterioration. Supervisors shall ensure defective or faded hard hats are taken out of service and replaced.

IV. Eye and Face Protection

Supervisors shall ensure that all employees wear appropriate eye and face protection where their eyes and face are exposed to hazards. These hazards include flying particles, molten metal, liquid chemicals, acids or caustic liquids, chemical fumes, gases/vapors, or potentially injurious radiation.

Safety glasses conforming with ANSI Standard Z87.1 with side shields to provide basic impact protection must be worn when operating or working near tools or machines that may throw particles such as woodworking tools, power tools, chippers, weed eaters, grinders, etc.

Safety goggles provide impact protection from flying particles, dust and mist/splash and must be worn whenever there is a need to protect the eyes from particles, dust, or mist/splash which cannot be stopped by wearing safety glasses.

Face shields provide impact protection from flying particles, dust and mist/splash and must be worn whenever danger exists from flying particles, dust or mist/splash from chemicals or other substances when glasses/goggles do not provide adequate protection.

Employees whose vision requires the use of corrective lens/spectacles while engaged in operations that involve eye hazards shall wear eye protection that can be worn over the prescription glasses without interference.

V. Hand Protection

Supervisors shall ensure all employees wear appropriate hand protection when their hands and fingers are exposed to hazards. These hazards can cause cuts, lacerations, abrasions, punctures, chemical burns, thermal burns, exposure to harmful temperatures, and bloodborne pathogens. In cases where hazardous products are involved, refer to the Material Safety Data sheet.

VI. Hearing Protection

Employees shall be required to wear hearing protection in designated work areas or operations where it has been determined that the noise levels exceed allowable limits (85dB TWA). Hearing protection is required when employees are temporarily exposed to loud percussion or concussion noises from operations such as, but not limited to pavement breaking, compacting, power impact tools, blasting, and post pounding.

VII. Chainsaw Personal Protective Equipment

- A. A mesh visor and safety goggles/glasses to prevent injury from flying chips or a chain that may break off and fly toward the face.
- B. Hard hat with ear muffs/ear plugs.
- C. Chainsaw Chaps to protect legs from severe cuts in the event the chain saw slips.
- D. Gloves to improve grip and protect hands from abrasions, cuts, and splinters.
- E. Fitted clothing.
- F. Proper footwear

VIII. Respiratory Protection

In some cases, airborne contaminants such as dusts, fumes, gases, or vapors may not be eliminated in the workplace by accepted control measures such as enclosures, local or general ventilation. When such measures are not feasible, respirators may be required to be worn by affected employees after an assessment has been conducted on those airborne contaminants by an industrial hygienist. Refer to the Material Safety Data Sheet for the products in use for further guidance.

Supervisors shall ensure that when respirators are required to be worn by employees, the department's respiratory protection program is followed. Employees are responsible for using respirators in accordance with the training and instructions received.

IX. Fall Protection Equipment

Safety harnesses, lanyards, lifelines, or guardrails are required when employees are working six feet or more above any work surface.

Lifelines shall be secured above the point of operation to an anchorage or structural member capable of supporting a dead weight of 5,400 pounds.

If a safety harness/lanyard or lifeline is subject to in-service loading, it shall be replaced and not used.

Body harnesses shall be inspected prior to each use by the user. Annually the harness must be inspected by a competent person, other than the user.

Inspect buckles, D-rings, back pad, loop keepers for damage. If damaged the unit must be taken out of service.

Only locking-type snap hooks shall be used for harnesses, lifelines, and lanyards.

Supervisors shall ensure that employees are properly equipped and trained to wear and utilize ODOT supplied fall protection equipment.

X. High Visibility Safety Apparel

All persons within the right-of-way of any highway or any other type of roadway or construction site who are exposed to either traffic (vehicles using the highway for purposes of travel) or construction equipment within the work area, regardless of job type, shall wear high-visibility safety apparel.

High-visibility safety apparel means personal protective safety apparel that is intended to provide conspicuity during both daytime and nighttime usage and that meets the Performance Class 2 or Class 3 requirements of the ANSI/ISEA 107-2004 publication entitled "American National Standard for High-Visibility Safety Apparel and Headwear."

Safety vests meeting Performance Class 2 and Class 3 requirements will be provided to employees by ODOT. T-shirts and jackets meeting ANSI Standard 107-2004 Class 2 and 3 are acceptable but must be purchased by the employee and shall maintain the appropriate ANSI 107-2004 Label. All safety apparel must be properly fitted and properly worn.

Supervisors shall decide if high visibility apparel is faded or soiled beyond reasonable usefulness in terms of conspicuity. When there is any doubt whether the apparel offers employees the high-visibility characteristics intended by this SOP, it shall be replaced with new apparel which unquestionably meets Department intent to maintain very high levels of conspicuity. If there is any dispute, a safety representative will make the final decision.

All ODOT issued rain gear shall be safety green in color and meet the Performance Class 2 or Class 3 requirements.

For daytime activity, flaggers shall wear safety apparel meeting the requirements of ANSI 107-2004 standard performance for Class 2 or Class 3 risk exposure. For nighttime activity, flaggers shall wear safety apparel meeting the requirements of ANSI 107-2004 standard performance for Class 3 risk exposure.

XI. First-Aid Kits

First-aid supplies must be easily accessible and properly stocked.

XII. Work Clothing

All employees assigned to perform outdoor work activities or work in a shop or repair facility are required to wear, as a minimum, a shirt with sleeves that covers the torso and full length pants. Shirts and pants shall not be altered or cut off in any way.

XIII. Footwear

Employees shall wear suitable footwear when working in areas where there is a danger of foot injuries due to falling or rolling objects, puncture hazards, or electrical hazards. Light footwear such as, but not limited to tennis shoes and sandals, will not be worn. Safety or heavy work shoes that cover the ankle are recommended and must be worn properly.

XIV. Vehicles and Heavy Equipment

A. Pre-Trip Inspections & Use of Accident Prevention (Red) Tags

No employee shall be required to operate equipment that any reasonable operator in the exercise of ordinary care would know might cause injury to the employee or anyone else, according to Article 11.03 of the OCSEA contract. Accordingly, an EM-78 "Pre-Trip Inspection" form (See Appendix A) shall be completed at the beginning of the work shift

for dump trucks and heavy equipment. At the end of the shift, operators shall make note of any problems which require repairs.

Accident prevention (red) tags or Lock/Out - Tag/Out device shall be used as a temporary means of warning employees of an existing hazard such as defective tools, equipment grounded for repairs, etc. (OSHA1926.200). If a disagreement arises concerning the safety of equipment, refer to Article 11.03 of the OCSEA contract. Tags will be removed only when a safety representative has determined that the unsafe item or equipment has been repaired, replaced, or taken out of service permanently.

B. Seat Belts

All drivers and passengers are required to wear seat belts when operating or riding in a vehicle or operating equipment with a rollover protective structure (ROPS). Seat belts and shoulder straps for vehicles so equipped must be worn properly with the seat belt secured over the lap and the shoulder harness secured over the arm and shoulder.

C. Lighting, Marking & Conspicuity

It is ODOT's policy to maximize safety when vehicles and the work force are in highway and construction maintenance operations. All safety lighting will be flashing lights, amber in color, composed of photo strobes or LED's or a combination of both. The specific number of safety lighting devices per piece of equipment and the location of such devices shall meet the minimum standard of 360 degrees of visibility.

Refer to Division of Facilities and Equipment Management *Policy Number 19-002(P), Equipment Lighting, Marking and Conspicuity Policy*, and to *EMS Procedure EIP-2022, Dump Truck Lighting*.

D. Backing Vehicles and Equipment

Backing vehicles and equipment is the number one cause of serious accidents, costly damage, injuries and fatalities among employees on construction sites. As the vehicle size increases and visibility to the rear of the vehicle decreases, there is a higher level of responsibility on the operator.

On any type of vehicle or equipment with an obstructed view to the rear:

1. There shall be a reverse signal alarm audible above the surrounding noise, or
2. An observer shall signal the assured clear distance.

E. Traffic Control Deployment

All employees shall ride in the enclosed passenger area of a vehicle when traveling to or from a job site. No riding is permitted in the back of trucks or in a loader bucket. When deploying or picking up traffic control devices such as cones and barrels, employees may ride on the various types of vehicles appropriate for this activity.

F. Operation of Equipment

No employee shall operate any type of equipment or participate on active roadway projects while wearing earphones. As used in this section, "earphones" means any headset radio, tape player, Bluetooth, or other similar device that provides the listener with radio programs or music through any device that covers or is inserted into all or a portion of the ear(s). The only exclusion would be a hands-free headset used for traffic control purposes.

G. Seasonal Employees

Transportation Seasonal Help (TSH) shall be trained on safe and proper work methods before assignment. TSH who possess a valid operator's license are permitted to operate pickup trucks, vans, station wagons, passenger vehicles, push mowers and lawn tractors only. TSH may operate one-ton dump trucks and one-ton stake-body trucks (non CDL-required) and pull trailers providing supervision conducts a check ride prior to operation. No seasonal employee shall flag unless they have been adequately trained and demonstrated proficiency.

H. Work Zone traffic creates serious hazards for motorists and workers. Supervisors, Transportation Managers, and Lead Workers shall conduct periodic Work Zone inspections using the "ODOT Job Site Safety Survey" (See Appendix B) to ensure overall traffic control compliance.

XV. Working Alone

The issue of working alone is best addressed on a case-by-case basis. The assignment of one or more employees to a project/work location shall be made with regard to the type of work to be performed and the risk involved. A periodic check on the safety of employees who work alone will be made or a means of communication to the worksite based location will be provided to employees who work alone. If there is a serious working alone issue, or the issue cannot be resolved, then the district safety representative shall be the final authority.

When an employee is called out after normal working hours for an emergency, the immediate supervisor shall make a follow-up call or check on the employee.

XVI. Duty to Report

All employees who are injured or are involved in an accident/incident during the course of their employment shall immediately file an injury or vehicle accident report with the District or Central Safety Office. Refer to the Standard Operating Procedures for work-related injuries and vehicle accidents for guidance on filing claims.

XVII. Electrical Safety Procedures

A. Requirements when working on energized electrical equipment:

1. Only Qualified/Authorized Employees (these are employees who have been trained, are experienced, and clearly demonstrate a proficiency to work safely) are authorized to work on energized electrical equipment.
2. Follow ODOT's Lock/Out - Tag/Out Program
3. Use a Lock/Out - Tag/Out kit to de-energize equipment.
4. Where potential contact with energized components exists when Lock/Out Tag/Out cannot be applied, supervisors/employees must comply with OSHA 1910.331-335. Personal protection consists of: ANSI Z87.1 approved safety glasses, shields, voltage-rated gloves, dielectric hard hat, proper footwear, ear canal inserts, FR-rated safety vest and voltage tools.

XVIII. Health & Safety Committees

Health & Safety Committees shall be established in each district and central office. Their general responsibilities will be to evaluate safety and health issues raised by employees, conduct periodic inspections, identify and recommend training needs and make appropriate recommendations to management. Article 11.12 of the OCSEA contract provides specific guidance.

Additionally a Statewide Health & Safety Committee shall be established. The mission of this committee will be to set the direction for statewide health and safety initiatives and resolve issues from the districts committees which have statewide implications.

XIX. Cell Phones & Other Electronic Communication Devices

Employees are required to maintain absolute attention to the operation of vehicles and equipment – and other tasks requiring their undivided attention. Cellular phones and text messaging devices are distractions.

The use of cell phones and text messaging while driving a state vehicle or personal vehicle for state business is discouraged. Employees are required to observe any safety precautions issued by their cell phone provider, and to obey any ordinance regulating cell phone use while operating a moving vehicle. Employees are required to report any citations received in the same manner they are required to report other traffic citations received when operating a state vehicle.

Working along a right-of-way that is not closed to traffic also demands full and undivided attention to surroundings. Cell phone use is strictly prohibited when flagging traffic.

Cell phone use is strictly prohibited when operating heavy equipment. Examples of heavy equipment are, but not limited to: backhoes; front end loaders; dozers, and graders.

XX. Tailgate Safety Talks

A tailgate safety talk is a short, informational safety meeting which shall be conducted at the crew level on a regular or as-needed basis by first-line supervisors or crew leaders regarding job-related hazards and safe work practices. A tailgate safety talk should take place when a particular job hasn't been performed for some time, when a new employee joins the crew, or when a job or location poses specific hazards such as high volume, high speed traffic or limited sight distance approaches to the work area.

It is best to schedule a talk before the work day begins. Discussions can include planning the work zone setup, identifying work environment hazards, conducting pre-trip inspections of vehicles and equipment, selecting the right personal protective equipment, and awareness of emergency procedures. On the other hand, a short meeting during or at the end of the work day to discuss a "near miss" incident or lack of attention to safety also works well. All tailgate talk activity shall be documented on the MR-502 form, using specific activity code.

TRAINING

Education and training is essential in developing and maintaining a safe working environment. Training opportunities will be made available for employees based on their classification and duties. Classes will be developed and coordinated by the Office of Safety & Health in conjunction with the Office of Training.

FISCAL IMPACT

Districts and divisions are responsible for funding the purchase of safety equipment and supplies, personal protective equipment, and safety training.

Appendix B

Ohio Department of Transportation

Job Site Safety Survey



Work Location:	Inspection Date:
Type of Operation:	Arrival Time:
Supervisor/Crew Leader:	Leave Time:
Safety Representative:	# of Contacts:

Traffic Control Devices	Good	Needs Work	Comments
Advance Warning Signs			
Spacing of Signs			
Condition of Signs			
Intersection(s) Signed			

Flagging	Good	Needs Work	Comments
Number & Location			
Communications			
Proper Devices Utilized			
Proper Attire			

Lane Closure	Good	Needs Work	Comments
Proper Size Cone & Taper			
Cone/Barrel Spacing			
TMA/Shadow Vehicle			
Buffer Zone			
Arrowboard(s)			
Traffic Congestion			

Personnel Safety Equip.	Good	Needs Work	Comments
Safety Vest/Rain-suit			
Hand Protection			
Eye/Face Protection			
Hearing Protection			
Head Protection			
Other Required?			

Equipment/Process	Good	Needs Work	Comments
Vehicles (process, SMV, etc)			
Hand Tools (shovels, etc)			
Powered Tools (chainsaw, etc)			
Trenching/Shoring (equip/use?)			
OUPS Ticket with Operator			

Inspector Recommendations:
