

T0278 - Appendix #1
NJDOT Safety Standard Operating Procedure
Contractor Safety Requirements

I. Purpose

To establish procedures for the uniform practice of providing site specific safety information to non-NJDOT personnel such as contract, sub-contract, visiting and voluntary personnel. It is the policy of the New Jersey Department of Transportation (NJDOT), to inform contractors of site conditions that might raise health and safety concerns that are unusual or unique to NJDOT. It is the responsibility of the contractor to protect their employees, subcontractors, and suppliers by providing a safe place of employment. The NJDOT does not establish nor enforce safety practices for the benefit of a contractor, subcontractor, supplier or their employees.

II. Scope

This Procedure will cover the required safety information needed to be provided to non-NJDOT entities working on NJDOT property or performing work on behalf of the NJDOT. This Procedure does not exempt contractors from complying with occupational safety and health requirements of contract specifications. Non-NJDOT entities are responsible for conforming to acceptable safety and health practices for the protection of NJDOT employees and property.

III. Authority

New Jersey Public Employee Occupational Safety and Health (PEOSH) Standards as established under N.J.S.A. 34:6A-25 et.seq, N.J.A.C. 12:100 and N.J.A.C. 12:122.

IV. Definitions

1. Non-NJDOT Entity

Personnel or businesses, such as contract, sub-contract, supplier, visitors, sales people, and voluntary individuals that are not NJDOT employees that visit to conduct work on NJDOT property or on behalf of the NJDOT. This does not include entities responding for emergency or regulatory enforcement purposes. Also referred to as non-NJDOT personnel.

Examples of work include those secured to provide services for the purpose of:

- new construction or remodeling
- maintenance, repair, modifications, retrofits, modifications, inspection and testing services for facilities or equipment
- conducting research
- offering material or supplies for sale
- training NJDOT personnel on equipment and vehicles

2. Person In Charge

The Project Manager, Supervisor or Manager who has authority over the non-NJDOT entity.

3. Prohibited Access Space

Any space classified as a "Class A" confined space or any space becoming a Class A space upon testing. NJDOT personnel are not allowed to enter Class A spaces.

Reference: Safety Standard Operating Procedure "Confined Space Entry".

The following parameters are used to classify a Class A space:

- The toxicity is immediately dangerous to life or health (IDLH).
- A flammability of 20% or greater of the Lower Explosive Limit (LEL).
- The oxygen content is 16% or less or greater than 23.5% by volume.
- Rescue procedures require an entry of more than one individual fully equipped with life support equipment.

V. Procedure

NDDOT Person in Charge Responsibilities

- A. This SOP shall be provided to any non-NJDOT entity visiting to conduct work on NJDOT property or performs work on behalf of the NJDOT.
- B. A copy of the NJDOT Safety Manual shall be made available, upon request, to any non-DOT entity that visits NJDOT property.
- C. The NJDOT is responsible for the safety of its own employees. If the unsafe operation of equipment or unsafe work practice of a non-NJDOT entity could endanger NJDOT employees, the Person in Charge is obligated to prevent such danger. Moreover, NJDOT is generally responsible for the overall safety and health conditions on the work site for the benefit of all employees. Therefore, the NJDOT Person in Charge must verify that individuals have been trained and are following good acceptable safety practices before allowing any non-DOT entity to operate NJDOT equipment.
- D. Emergencies are to be reported to the local emergency agency through the 911 system. In addition, any emergency effecting or injuring NJDOT employees or the public shall also be reported to the Ewing Headquarters Security Station at 609-530-5291. It is the Person in Charge's responsibility to document injuries involving non-NJDOT personnel.
- E. The NJDOT Person In Charge, upon discovering concerns that are not compliant with generally accepted safe work practices or regulatory standards, shall take appropriate action to ensure that the contractor is informed of such concerns, and to ensure that NJDOT personnel are not exposed to a known and recognized hazardous condition. Contact The Bureau of Employee Safety if there is any uncertainty.
- F. It may not be practical for NJDOT personnel to use Departmental safety equipment such as: fall protection systems, scaffolding, or shoring. When it is necessary for NJDOT employees to use contractor safety equipment, the Person in Charge shall make sure that the equipment meets requirements established by the NJDOT Safety Manual and appropriate training on the equipment is provided to the employees.

NJDOT SECURITY RESPONSIBILITIES

- A. Notify the Bureau of Employee Safety at 609-530-5472 upon receiving notification of any situation that results in:
- Injury to NJDOT employees, non-NJDOT employees or members of the public that occur on NJDOT property and result from the actions of or work conducted by a non-DOT Entity.
 - Other fire, police, medical, hazardous substance, health and safety emergencies being reported by a non-DOT Entity.

Non-DOT Entities Responsibilities

- A. Non-DOT entities shall establish and follow their own safety program and shall meet all applicable facility and workplace safety and health regulatory requirements (such as OSHA or Department of Community Affairs, Division of Fire Safety). Non-DOT personnel shall follow the safety program established by their prime employer.
- B. Emergencies are to be reported to the local emergency response agency through the 911 system and in accordance with the entity's own emergency plan. Fire, police, medical and hazardous substance emergencies occurring on NJDOT property must also be reported to the NJDOT Person in Charge. If the Person in Charge is not readily available, report the incident to the Ewing Headquarters Security Station at 609-530-5291. In addition, any emergency effecting or injuring NJDOT employees or the public shall also be reported to the NJDOT Person in Charge and the Ewing Headquarters Security Station at 609-530-5291. It is the non-DOT entity's responsibility to take corrective action and report workplace injuries according to OSHA requirements.
- C. Contractors are required to operate and maintain their own safety equipment. Safety equipment includes, but is not limited to:
- Confined space entry tripods
 - Life lines, harnesses and fall protection systems
 - Scaffolding
 - Personal protective equipment (safety glasses, gloves, hard hats, respiratory protective equipment, wet weather equipment, safety vest, etc.)
 - First aid kit
 - Shoring
 - Barricades
 - Gas detection equipment for atmospheric assessment other equipment necessary to safely complete the project
- D. Emergencies are to be reported to the local emergency agency through the 911 system and in accordance with the entity's own emergency plan. Fire, police, medical and hazardous substance emergencies occurring on NJDOT property must also be reported to the Ewing Headquarters Security Station at 609-530-5291. In addition, any emergency effecting or injuring NJDOT employees or the public shall also be reported to the Ewing Headquarters Security Station at 609-530-5291. It is the non-DOT entity's responsibility to take corrective action and report workplace injuries to OSHA.

- E. The Bureau of Employee Safety recommends that the following minimum safety equipment and work attire be worn when visitors access any project site. PPE must meet current ANSI standards.
1. Head protection (hard hats)
 2. Eye protection (safety glasses)
 3. Appropriate clothing for the task that is being performed. Long pants & short sleeve shirt.
 4. Appropriate footwear based on an assessment of hazards that may exist while performing work.
 - Closed toed, slip resistant, puncture resistant sole footwear
 - Crush resistant toes or toe/metatarsal guards when the hazard warrants.
 5. High visibility safety apparel while exposed to road operations or vehicular traffic.

Appendices

Special Safety Considerations

The following situations present unique environments and must be considered by non-NJDOT entities, during the planning stages, before work is begun. The NJDOT requirements for NJDOT personnel are provided in the NJDOT Safety Manual. These Considerations are provided for information only. The Non-DOT entity shall establish their own safety program meeting applicable hazard-specific regulations.

A. Prohibited Access Spaces & Confined Space Entries

1. Identification of Confined Spaces

The New Jersey Department of Transportation Confined Space Identifier Table, of this SOP, contains a list of Confined Spaces commonly encountered by NJDOT employees. The classifications given on this attachment is meant as a guide only. Each specific space must be tested to determine what hazards actually exist at the specific Confined Space.

2. Confined Space Permit

A copy of the NJDOT Confined Space Entry Permit is included in this SOP. A Permit that meets equivalent, industry accepted, risk management based standards such as American National Standard Institute (ANSI) or Factory Mutual may be substituted for the NJDOT Permit.

3. Hot Work Permit

A copy of the NJDOT Hot Work Permit is included in this SOP when hot work is to be performed. A Permit that meets equivalent, industry accepted, risk management based standards such as American National Standard Institute (ANSI) or Factory Mutual may be substituted for the NJDOT Permit.

B. LOCKOUT/TAGOUT Work

When outside personnel are engaged in servicing and/or maintenance work, the non-NJDOT entity must inform the NJDOT Person In Charge of their respective lockout/tagout procedures. All personnel must coordinate, understand and comply with the restrictions and prohibitions of each employer's energy control procedures.

1. Group Work

When servicing and/or maintenance are performed, they must use procedures that afford employee protection that is equivalent to that of an individual lockout/tagout system.

2. Shift Changes

Procedures must be used during shift or personnel changes to ensure the continuity of lockout/tagout protection.

3. Identification of LOTO/TAGOUT

The New Jersey Department of Transportation LOTO/TAGOUT Equipment and Energy Source Survey Table, of this SOP, contains a list of LOTO/TAGOUT scenarios commonly encountered by NJDOT employees. The information given on this attachment is meant as a guide only. Each specific energy source must be evaluated to determine what hazards actually exist at the specific site.

C. Trenching and Excavation

Reference NJDOT Safety Manual excerpt, WORK OPERATION, Excavations, Trenching & Shoring

D. High Voltage Electrical Work

Reference NJDOT Safety Manual excerpt, NJDOT Safety Standard Operating Procedure (HIVOLT.1)

E. Elevated Work

Reference NJDOT Safety Manual excerpt, NJDOT Safety Standard Operating Procedure (FALL.2)

F. Work Zone Safety

The Work Zone Safety Set-up Guide must be followed when establishing work zones, on the State highway system, unless directed otherwise by a contract with an approved Traffic Control Plan (TCP). Anyone participating in a NJDOT Traffic Incident Management activity must also follow the Work Zone Safety Set-up Guide. A copy is available through the internet link:

<http://www.state.nj.us/transportation/publicat/pdf/WorkZoneSafetySetupGuide.pdf>

New Jersey Department of Transportation
Confined Space Identifier Table

SPACE	CLASS
ASPHALT HOT BOX	B
BELOW GROUND AREAS (TRENCH, WATER MAIN PIT, WELL)	C
BOILER	B
BOX BEAM BRIDGE	C
CATCH BASIN	C
CHLORINE SHED	A*
CLEANOUT PIT	B
CRAWL SPACE	C
CULVERT	C
DRAW BRIDGE (DIESEL ENGINE ROOM, EMERGENCY GENERATOR ROOM, MACHINERY ROOM, UTILITY VAULT)	C
DUCT/PIPE/CHASE	C
HYDROMULCHER STORAGE BOX	C
JUNCTION BOX (ELECTRICAL)	C
MANHOLE	C
OIL/WATER SEPARATOR	B
PUMP STATION	B
STREET SWEEPER HOPPER	B
TANK (CALCIUM CHLORIDE)	B
TANK (OIL DISTRIBUTION)	B
TANK (PAINT TRUCK)	A*
TANK (PESTICIDE)	A*
TANK (WATER WAGON)	C
UTILITY VAULT (FACILITY)	C
VACTOR DEBRIS TANK	B
WATER TOWER	A*

**NOTE: NJDOT Employees are not allowed to enter Class A Confined Spaces.*

New Jersey Department of Transportation
 LOTO/TAGOUT
 Equipment and Energy Source Survey Table

Equipment Name/Type	Energy Source (Type & Magnitude)	Service Panel Disconnect/ Isolation Point	Identification Number	Lockout/Tagout Device Used	Auxiliary Devices Needed
Air Compressor	Pneumatic	Service Panel	TD # (Various)	Tagout	Discharge Residual Air
Dump Truck	Hydraulic	Remove Ignition Key	TD # (Various)	Block/Remove Key	See Comment #1
Loader	Hydraulic	Remove Ignition Key	Equip # (Various)	Block/Remove Key Body Prop	See Comment #1
Panel Box	Electrical	Main breaker	Labeled/ Connected	S.P.C.B. Lockout	None
Road Sweeper	Hydraulic	Remove Ignition Key	TD # (Various)	Block/Remove Key	See Comment #1
Snow Plow	Hydraulic	Remove Ignition Key	Equip # (Various)	Block/Remove & Flip	None
Spreading System	Hydraulic	Control Panel	TD # (Various)	None	See Comment #2
Strobe Lights	Electrical/ Residual	Control Panel	Labeled/ Connected	None	See Comment #3
Tractor Mower	Hydraulic	Remove Ignition Key	TD # (Various)	Block/Remove & Flip	See Comment #1

#	Comment
General	Vehicles shall be placed in the Service Position prior to the performance of maintenance or repair.
1	When inspecting equipment, remove the key and place in pocket, set brake and chock wheels while performing minor service.
2	Attempt to clear clogged auger using reverse button. Make sure system is turned off before attempting to clear with bar, DO NOT GET HANDS OR FINGERS AROUND AUGER. As last resort return to yard and dump tray to clear auger.
3	Before attempting to change bulb, have qualified person (mechanic) ground system to discharge residual electrical energy.

Excavations, Trenching & Shoring

1. Excavations 4 feet deep or more shall be treated as a confined space and shall have appropriate shoring or sloping. ALL PERSONEL SHALL RECEIVE TRAINING IN CONFINED SPACE AND LOCKOUT-TAGOUT PROCEDURES.
2. Excavations of 6 feet or greater shall be protected to prevent an employee from falling into the excavation.
3. Accepted Engineering Practices - the employee protection system shall be designed or approved by a registered professional engineer working within a discipline applicable to the excavation work; i.e., it would be inappropriate for an electrical engineer to approve shoring design for an excavation.
4. Competent Person - a person serving in this capacity possesses the capability of identifying existing and potential hazards for workers.
 - a) To be a "competent person" a person must have had training in, and be knowledgeable about, soils analysis, the use of protective systems and the requirements of this standard.
 - b) The competent person having such training and knowledge must be capable of identifying existing and predictable hazards in excavation work and have the authority to take prompt measures to abate these hazards. Thus, a backhoe operator who would otherwise meet the requirements of the definition is not a competent person if the person lacks the authority to take prompt corrective measures to eliminate existing or potential hazards.
5. Surface encumbrances – all surface encumbrances must be removed or supported to protect employees.
6. Underground installations – the location of the utility underground installations must be identified before excavation. While open, underground installations must be protected, supported, or removed to protect employees.
7. Access and egress – a competent person must design the structural ramps to be used to access or exit excavations.
8. Egress from trench excavations – a stairway, ladder, ramp, or other safe means of egress must be located in trench excavations that are four feet or more in depth so as to require no more than 25 ft. of lateral travel for employees. An employee riding in a backhoe bucket to either enter or exit trench excavations is not “another safe means of egress” and is not an acceptable practice.
9. Falling loads – employees are not permitted underneath loads handled by lifting or digging equipment. Employees also must stand away from any vehicle being loaded or unloaded to avoid being struck by any spillage or falling materials. Operators may remain in the cabs of vehicles being loaded or unloaded if the vehicle is equipped to provide adequate protection. Employees also must not be allowed to work under loads (both excavated materials and slung loads).
10. Water accumulation – employees must not work in excavations with accumulated water or in excavations in which water is accumulating, unless adequate precautions to protect employees have been taken. The precautions may vary with each situation, but may include special support or shield systems to protect from cave-ins, water removal to control the level of accumulating water, or use of a safety harness and lifeline.

11. Adjacent structures – where the stability of adjoining buildings, walls, or other structures is endangered by excavation operations, support systems such as shoring, bracing, or underpinning must be provided to ensure the stability of the structures and for employee protection.
12. Loose rock or soil – employees must be protected from the hazards of falling or rolling of loose rock or soil from an excavation face. Protection methods may include scaling to remove loose soil; installation of protective barricades at intervals on the face to stop and contain falling material; or other means that provide equivalent protection.
13. Inspections – daily inspections of excavations, the adjacent areas, and protective systems must be made by a competent person for evidence of possible cave-ins, indications of failure of protective systems, hazardous atmospheres, or other hazardous conditions. The inspection must be conducted prior to start of work and as needed throughout the shift.

Inspections also must be made after every rainstorm or other hazard-increasing occurrence. If the competent person finds evidence of a hazardous condition after an inspection, the immediate supervisor must be notified and employees must be removed from the hazardous areas until necessary precautions are taken for protection.

14. Fall protection – when employees or equipment must cross over excavations, employers must provide walkways or bridges with standard guardrails. Adequate physical barrier protections for example barricade, handrail system, or cover must be implemented to protect employees working around excavations of 6 feet or greater.
15. Employees must not be permitted to work on the faces of sloped or benched excavations at levels above other employees except when employees at lower levels are protected adequately from the hazards of falling, rolling, or sliding material or equipment.
16. Shield systems must not be subjected to loads exceeding those that the system was designed to withstand.
17. Employees must be protected from the hazards of cave-ins when entering or exiting the shielded areas.
18. Evacuation Checklist:

- ✓ Is the excavation more than 4 feet in depth?
- ✓ Is benching, multiple benching, shoring, or shielding required?
- ✓ Is a competent person in charge of the operation?
- ✓ Has a competent person determine soil type?
- ✓ Has a registered professional engineer approved the procedure?
- ✓ Is there water in the excavation?
- ✓ Are there adequate means of access and egress?
- ✓ Are means of egress from the cut, cavity, or depression no more than 25 feet from the work?
- ✓ Are there any surface encumbrances?
- ✓ Is there exposure to vehicular traffic?
- ✓ Does mobile equipment have a warning system?
- ✓ Is equipment operating in or around the excavation?
- ✓ Are adjacent structures stabilized?
- ✓ Are procedures required to monitor, test, and control hazardous atmospheres?
- ✓ Is emergency rescue equipment required?

<i>NJDOT Safety Standard Operating Procedure (HIVOLT.1)</i>

I. Purpose

To establish procedures for working distances in proximity to high voltage overhead lines.

II. Scope

This procedure will cover all Departmental employees.

III. Definitions

High Voltage

Nominal 750 volts or greater.

Qualified Person

Someone who has successfully completed the Departmental training in high voltage proximity at the Qualified Person Level. An employee familiar with the operation of equipment and the hazards involved with the work who has specific training, knowledge and experience. The employee shall demonstrate competency in the area for which the person has responsibility and authority to control.

Emergency Work

Work required to be performed promptly to ensure the safety of the motoring or pedestrian public. This is not to be confused with emergency funded or overtime funded work.

IV. Procedure

A. Overview

The High Voltage Proximity Act establishes specific working distances from high voltage conductors.

B. Qualified Person

1. A Qualified Person shall maintain a minimum distance of 6 (six) feet from all high voltage sources.
2. In the event that a qualified person must come closer than 6 feet from a high voltage source:
 - a) The line must be de-energized
 - b) The line must be insulated
 - c) The Regional Safety Coordinator or Safety Bureau must be contacted prior to the planned work
 - d) A High Voltage Work Permit must be completed and sent to the Bureau of Safety within 24 hours, if the minimum distance was not able to be maintained during emergency work. A copy of the Permit must also be sent to the Regional Safety Coordinator.

C. Unqualified Person

1. Shall maintain a minimum distance of 10 feet from any overhead high voltage line.

D. Equipment

1. All uninsulated vehicular equipment shall be maintained at a minimum distance of 10 feet from overhead high voltage lines. Lift trucks, boom trucks, cranes, etc. shall not be operated when uninsulated load lines can contact overhead lines.
2. All PPE shall be inspected, maintained and replaced as per the Product Manufactures Requirement.

NJDOT Safety Standard Operating Procedure (FALL.2)
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I. Purpose

To establish specific minimum conditions for employees performing elevated work.

II. Scope

This policy will cover all employees whose work is performed where there is a potential free fall greater than six (6) feet or elevated work is performed over/near water.

III. Procedure

A. Overview

All elevated work requires that each employee performing such work wear a harness and secured lanyard. The term harness shall refer to a full body safety harness when used in this SOP. Safety belts are no longer to be used for fall protection by NJDOT personnel. Double lanyards, cables, retractolocks, etc., will be used with a harness to provide 100% fall protection while performing elevated work. Each job must be evaluated and a method devised for providing 100% fall protection to all employees whose work requires them to be above six feet. This method must be in place before the work begins.

B. Protective Equipment

Only approved harnesses and lanyards will be used. The entire fall protection system (harness, lanyard and anchorage point) shall be evaluated based on the fall hazard present.

1. Harnesses will have straps properly fastened at all times when in use. Harnesses and lanyards will be inspected by the user before and after each use. Any found defective will be replaced immediately. Any lanyard or harness subjected to a fall must be replaced.
2. Lanyards shall not exceed six feet and shall be sized and selected based on the work operation.
3. Lanyards will be connected to a secure object that will support a minimum of 5000 pounds. When secure objects are not available, other means must be supplied to assure the employees safety. Employees shall not tie off to an adjacent pole, structure, or equipment while working from an aerial lift.

C. Examples of Elevated Work

1. All scaffolding work where the work platform is six feet or more above ground or floor level.
2. Working from a fixed ladder when:
 - The employee's feet are above 6 feet from a platform.
 - The fall potential between levels is greater than 6 feet.

Note: Fall protection on fixed ladders may be achieved by a ladder safety device. When the fixed ladder is short and a ladder safety device is impractical, attachment to an anchorage point shall be used.

3. When working within 10 feet of edge on roof tops or open sided floors over six feet or higher that are not guarded by railing of 42" high. Special care must be taken when working near skylights, on roofs weakened by damage or rust posing a hazard of falling through. Special fall protection equipment is needed when working on a roof.
4. Working from suspended scaffold, picker basket, mobile scaffold, JLG lift, articulating or extendable boom and any other equipment capable of elevating an employee above six feet.
5. Any area over 6 feet high where the employee is not afforded the protection of guardrails or walls a minimum of 42" high.
6. Work on navigation walkways, which do not have railing on both sides of an unprotected working/walking side or edge.
7. Any time protective guard rails or other barricades are removed on a temporary basis exposing the employee to a potential fall of more than six feet.

D. Examples of Elevated Work Over or Near Water

1. Any area over water where the employee is not afforded the protection of standard railings or walls a minimum of 42" high. Including all work on navigation walkways, which do not have railings on both open sides.
2. Working from a fixed ladder when the employee's feet are at an elevation exceeding six (6) feet from water level.
3. Working from suspended scaffold, picker basket, mobile scaffold, JLG lift, articulating or extendable boom and any other equipment capable of elevating an employee over water.
4. Any time protective railings or other barricades are removed on a temporary basis exposing the employee to a potential fall of less than six (6) feet into a body of water.

E. Access to Higher Elevations

1. Only approved ladders, scaffolds, stairs or mechanical equipment especially designed for lifting personnel (such as JLG) will be used to access work at higher elevations. All extension ladders will be secured or stabilized while elevated work is taking place.
2. Portable ladders must be maintained in good condition with tight joints, securely attached hardware and fittings, and freely operating movable parts. Ladders must be inspected frequently. Defective ladders with:

- broken or missing steps, rungs or cleats
- cracked or broken side rails
- other faulty equipment MUST be removed from service.

*Stepladders must be equipped with a metal spreader or locking device to securely hold the ladder in the open position. Ladders should be stored to protect them from the elements. Metal ladders must not be used near energized electrical equipment. All ladders must be placed so they have secure footing. Boxes, barrels, bricks, etc. shall not be used to obtain additional height. Nonslip bases should be used.

3. Overhead Hazards
When personnel are required to work in elevated areas above pedestrians or vehicle traffic areas where tools, equipment, etc. may fall and cause injury to personnel passing below, the area will be delineated, barricaded or roped off with safety tape to restrict entry into the danger zone.
4. Inclement Weather
When weather conditions make climbing and working surfaces hazardous, overhead work shall not be performed.