COMPANY NAME & LOGO

SAFETY & HEALTH PROGRAM



DISCLAIMER STATEMENT

MITA has developed this safety and health program as an overview of some of the important basic rules in the MIOSHA Construction Safety and Health Standards that are relevant to underground, road building, and infrastructure construction. It is intended to provide general information, but not advice regarding any particular situation. This program is not intended to set forth all the requirements of the applicable MIOSHA standards and should never be used as a substitute for the standards. Contractors and employees should always be familiar with the current and complete MIOSHA Construction Safety and Health Standards before commencing construction. Neither MITA nor its officers, employees, directors, contracting parties, members or publisher may be held responsible in any manner for any damage or loss, or any action whatsoever, resulting from inaccuracies or omissions in this program.

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- Employee Discipline Report FormIncident Report Form
- Foreman Safety Checklist
- Right to Know Posters
- Employee Sign-off Sheet
- Sloping, Benching, & Shoring Designs

SAFETY & HEALTH POLICY STATEMENT

Company Name is committed to providing employees and others a safe working environment. No job or task is more important than worker safety and health. Every effort will be made to plan a safe way to perform work and create an environment in which accidents and near misses are substantially reduced.

All applicable rules and regulations promulgated pursuant to the Michigan Occupational Safety and Health Act (MIOSHA) will be implemented and enforced by management.

Management acknowledges the importance of creating a positive safety culture through employee involvement and implementing effective policies and procedures. Employees are expected and encouraged to immediately correct and report unsafe conditions or potential safety and health hazards to management without fear of repercussion.

Every employee is responsible for complying with this Safety and Health Program and will be disciplined if found to be non-compliant.

Objectives for achieving a safe and healthy workplace will be as follows:

- Designate a qualified safety officer to coordinate the program.
- Pre-plan for safety and health (e.g. JSA, Pre-Task Analysis)
- Provide on-going safety and health training to employees (e.g. formal classroom training, toolbox talks).
- Employee engagement (e.g. participation, problem solving, reporting).
- Follow safety rules and procedures.
- Conduct regular jobsite inspections and monitoring. See Foreman Safety Checklist.
- Enforce safety and health rules and use appropriate discipline.

SAFETY DIRECTOR RESPONSIBILITIES

is the designated **Company Safety Director** and is responsible for coordinating, implementing, administering this program.

GENERAL RESPONSIBILITES

- A. <u>Employee Training</u>. Coordinate safety and health training and keep employees informed of all MIOSHA Construction Safety Standards and Occupational Health Standards pertaining to the work operation. Copies of standards shall be provided to employees upon request.
- B. <u>Safety/Health Procedures</u>. Understand potential job hazards and how to eliminate them by establishing safety and health procedures.
- C. <u>Employee Engagement</u>. Encourage employee participation to improve safety on jobsites (i.e. recommendations on procedures and training topics; encourage employees to inspect their work areas and report safety concerns and near misses to their foreman.
- D. <u>Jobsite Inspections</u>. Conduct periodic jobsite inspections to ensure foreman responsibilities are being implemented.
- E. <u>Documentation</u>. Ensure employee training (i.e. classroom, tool box talks, pre-task analysis), *Foreman Safety Checklists*, and any other proactive safety records are documented, and copies maintained at the main office. Ensure every employee completes an *Employee Sign-off Sheet*.
- F. <u>Postings</u>. Ensure a safety bulletin with required postings is posted and maintained at the main office and on all jobsites having a company jobsite trailer.
- G. <u>Incident Investigations</u>. Participate in all incident investigations resulting in serious bodily harm or high financial impact (i.e. injuries, illnesses, property damages). Ensure every incident investigation has been properly documented on the and corrective actions are completed before work continues. *See Incident Investigation Report*.
- H. Employee Discipline. Ensure *Discipline Policy* is properly implemented.
- I. <u>Recordkeeping.</u> Ensure recording and reporting requirements prescribed in *Recordkeeping Responsibilities* have been implemented.

FOREMAN RESPONSIBILITIES

The foreman or other designated qualified person is responsible for overall safety on the jobsite.

A "qualified person" is a person who, by possession of a recognized degree or professional standing, or who, by extensive knowledge, training and experience, has successfully demonstrated the ability to solve or resolve problems related to the subject matter and work. Responsibilities and duties include the following:

- a. Provide periodic and ongoing safety instructions (i.e. weekly tool box talks, daily safety huddles) to employees regarding operating procedures, hazards and safeguards of tools and equipment when necessary to perform the job; and how to recognize and avoid hazards.
- b. Inspect the construction site, tools and equipment to assure any unsafe conditions that may create a hazard are eliminated. *See Foreman Safety Checklist*.
- c. Instruct each employee, where known harmful plants, reptiles, animals or insects are present, as to the potential hazards, how to avoid injury, and applicable first aid procedures to be used in the event of an injury.
- d. Instruct each employee required to handle or use known poisons, toxic materials, caustics and other harmful substances regarding the potential hazards, safe handling, use, personal hygiene, protective measures required and applicable first aid procedures to be used in the event of injury.
- e. Ensure all employees have been instructed in the steps to be taken in case of an incident or emergency for each jobsite.
- f. Investigate all incidents (i.e. injuries, illnesses, property damages) on the jobsite that result in a recordable injury/illness or high financial impact. Serious near miss incidents should also be investigated. Immediately inform the Safety Director of the incident and provide him/her with a copy of the *Incident Investigation Report*. Complete any corrective actions before work continues or remove employees from the hazard.
- g. Ensure the *Disciplinary Policy* is being implemented for employees found non-compliant with this safety and health program and have each employee sign-off.
- h. Ensure employees are not knowingly allowed to work while under the influence of intoxicating beverages or substances which would impair the employee's ability to perform a task in a safe manner.
- i. Ensure a copy of this Safety and Health Program is available at the jobsite and maintain a safety bulletin board with required posters in jobsite trailers.

GENERAL RULES

The following safety and health rules must be obeyed by all employees. Failure to do so may result in disciplinary action.

1. SAFE PRACTICES

- A. Do not engage in horseplay or other unsafe behavior that would endanger you or another co-worker.
- B. Watch where you are walking. Don't run. Keep your mind on your work.
- C. Lift the right way with your legs, not your back. Get help if a load is too heavy.

2. REPORTING RESPONSIBILITIES

- A. If you see an unsafe condition, correct it immediately (if feasible) and inform your foreman. Do not hesitate to bring any safety concerns to your foreman.
- B. Report all injuries (yourself or coworkers), no matter how significant, immediately to your foreman.
- C. The use of illegal drugs or alcohol or being under the influence during working hours will be cause for termination. Inform your foreman if you are taking strong prescription drugs that warn against driving or using machinery.
- D. Make sure you know what the emergency procedures are at your jobsite (i.e. location of emergency phone, jobsite address, first aid kit, fire extinguisher locations, evacuation plan, etc.). Ask your foreman if you have any questions.

3. HOUSEKEEPING

- A. Maintain the floors of your work area. Pick up debris and sweep up daily.
- B. Remove or secure any material located in open areas that could be picked up and blown away by the wind.
- C. Material, scrap, and debris must be piled, stacked or placed in containers.

4. BARRICADES AND SIGNS

A. Barricade hazardous areas. Caution tape may not be suitable for preventing others from entering hazardous areas; guardrails or perimeter cables along with danger signs may be necessary to keep others out. Barricades should be illuminating and/or reflective during nighttime hours.

- B. Do not enter an area that has been barricaded. Seek instruction from your foreman.
- C. Post danger signs to alert other workers where an immediate hazard may exist that may not be readily seen (i.e. DANGER Overhead Powerlines).

5. HAZARDOUS ATMOSPHERES

A. Never enter a manhole, well, shaft, sewer, excavation, tunnel or other confined space which could possibly have a hazardous atmosphere due to lack of oxygen, or contain toxic or flammable gases, or has a possibility of engulfment by solids or liquids. If you come across these types of spaces, inform your foreman and wait for further direction. *Refer to Confined Space Program* for additional information.

6. PERSONAL PROTECTIVE EQUIPMENT

- A. If instructed to wear personal protective equipment...wear it!
- B. Wear a hard hat whenever there is a potential of being struck by an object or an object falling on you (i.e. working in excavations, working around mobile equipment, directing traffic, operating aerial lifts, tunneling, etc.).
- C. Wear appropriate eye protection (i.e. goggles, safety glasses, welding shields) when cutting, grinding, welding, chipping, jack-hammering, applying chemicals, flagging and other similar exposures.
- D. Wear hearing protection (i.e. earplugs or noise-cancelling earmuffs) when working around loud noise.
- E. Wear proper clothing on jobsites; the minimum requirements are work boots, shirts, and long pants. Other work operations may require steel-toed work boots, gloves, reflective vests, rubber boots, etc. Use sunblock to prevent sunburn.
- F. You must wear an appropriate respirator when exposed to excessive dust and other air contaminants (i.e. cutting block, painting operations, chemical applications). Your foreman will determine which appropriate respirator should be used. *Refer to Respirator Protection Program* for additional information regarding voluntary use of respirators or employees providing their own respirators.

7. ELECTRICAL

- A. Do not use a portable tool or extension cord unless it is plugged into a ground fault circuit interrupter (GFCI). Test the GFCI before plugging in the tool or cord to make sure it is working properly.
- B. Only use extension cords equipped with 3 prongs. Do not use extension cords if the ground prong has broken off.

- C. Routinely inspect all extension cords and trailing cords on tools for damage. Do not use damaged cords, either repair them or throw them away.
- D. Make sure all electrical power and other energy sources are locked out and tagged before working on equipment, machinery and tools.
- E. Make sure underground lines are de-energized before jack hammering or using another tool or equipment that may contact the underground line.
- F. Do not install, replace, or fix electrical systems. Only licensed electricians are qualified to work on electrical systems. Inform your foreman if you think your work duties may expose you to energized electrical parts or equipment.

8. OVERHEAD POWERLINES

- A. Keep yourself, tools, and equipment at least 10' away from overhead powerlines that are 50kV and below. The minimum distance increases for power lines over 50kV. Inform your foreman if you have any questions or cannot maintain clearances. Refer to *Crane Safety* for specific powerline clearances for cranes.
- B. **Do not** store material near or under power lines. If this is not feasible, the stored material must be kept a minimum of 10' plus the length of the material away from overhead power lines that are 50kV or less. The minimum distance increases for power lines over 50 kV.

9. FIRE PROTECTION

- A. Fire Extinguishers.
 - (1) At least one 2A-rated fire extinguisher must be available on every jobsite.
 - (2) Keep at least one 10 BC-rated fire extinguisher in the cab or within 25' of a crane or excavator, and also keep one within 75 feet of diesel and gasoline refueling areas.
 - (3) Inspect fire extinguishers every 12 months and label with an appropriate inspection tag.

B. Portable Fuel Containers.

(1) Store and transport flammable liquids (i.e. gasoline) in approved safety cans having a spring-closing lid, flashback arrestor screen, spout cover and is designed to safely relieve internal pressure. **Plastic gasoline containers are not permitted on jobsites.**

C. Smoking and Storage.

- (1) Do not smoke around flammable, combustible materials or any areas posted with "No Smoking" signs (i.e. refueling stations).
- (2) Do not place or store flammable or combustible material near open flames, sparks, or other ignition source.

D. Gasoline-powered equipment.

- (1) Shut engines off during refueling.
- (2) Do not use gasoline-powered equipment within closed buildings.

E. Propane/LP Storage.

- (1) Store tanks and cylinders in the upright position with caps on.
- (2) Secure cylinders with a chain, wire or suitable rack. Small portable propane tanks that cannot fall over do not have to be secured.
- (3) Do not store tanks/cylinders in buildings or poorly ventilated areas.

10. WELDING AND CUTTING

- A. Do not use welding and cutting equipment (i.e. torches) unless you have been trained and authorized to do so.
- B. Wear the appropriate personal protective equipment when welding or cutting (i.e. aprons, leggings, hard hats, and proper goggles, face shields, or safety glasses).
- C. Backflow devices must be used on gas and oxygen hoses or use a cutting torch that is equipped by the manufacturer with an internal backflow device.
- D. Do not weld or cut within 50' of explosives, stored cylinders, or stored fuel. All flammable or combustible material located within 35' of a welding or cutting operation must be removed or covered with fire-resistant blankets.
- E. Keep a 2A-10BC portable fire extinguisher (minimum size) in the immediate area during welding and cutting operations.
- F. Never weld or cut within a confined space without taking the proper precautions. *Refer to Confined Space Policy* for additional information.
- G. Clean all drums, barrels, and tanks of toxic, flammable, or combustible material before performing welding or cutting operations.

H. Cylinder Storage.

- (1) Separate oxygen cylinders and fuel gas cylinders by a minimum of 20' or install a noncombustible barrier between the cylinders that is at least 5' high with a minimum fire-rating of one hour.
- (2) Store cylinders (full or empty) valve-end up and secure them with a chain or bracket.
- (3) Place caps on cylinders when they are not in use.
- I. Exception for Storing a Single Oxygen Cylinder & a Single Fuel Gas Cylinder.
 - (1) A single oxygen cylinder and a single fuel gas cylinder (i.e. acetylene) may be stored together on a cart if the cart is designed for that purpose <u>or</u> the two single cylinders are secured to a wall or column.
 - (2) Make sure that both cylinders are secured in an upright position to the cart or to the vertical surface with straps, chains or another securing device.
 - (3) If using a cart, it must be set up on a firm, level surface.
 - (4) Do not put the cylinders or cart in heavy trafficked areas where they could be struck by vehicles or equipment.
 - (5) Both cylinders must have valves closed with protection caps on or are connected to a properly functioning regulator.
 - (6) Always use properly rated lifting components (i.e. chains, shackles, etc.) when suspending carts from cranes or other lifting equipment.
 - (7) The area below a suspended cart must be barricaded during active work hours.

11. PORTABLE LADDERS

- A. Only use type 1 or type 1A ladders.
- B. Don't use damaged or defective ladders (i.e. broken spreaders and steps, split side rails). Tag damaged or defective ladders and remove them from service.
- C. Make sure portable extension ladders are equipped with safety feet to prevent slippage. If a ladder is not equipped with safety feet, it must be tied off, blocked or otherwise secured.
- D. Always secure both the top and the bottom of a ladder that is used in conjunction with a scaffold or other temporary platform.

- E. Extend portable extension ladders at least 3' above the stepping off point.
- F. Use the "four to one" rule when using a portable extension ladder. One foot of base for every 4' of height.
- G. Don't fold up a step ladder and use it as straight (portable) ladders. Step ladders should only be used with the spreaders locked with all four legs set up on a stable base.

12. TOOLS

- A. Do not operate tools or equipment that you have not been trained or authorized to use (i.e. powder-actuated tools, heavy equipment, jack hammers).
- B. Do not use defective or damaged tools or equipment; remove it from service by locking out and tagging it or completely remove it from the jobsite.
- C. Before servicing, repairing, or adjusting any powered tool or equipment, make sure it is disconnected and locked out from the power source.
- D. Do not remove a guard or other safety device from a tool or equipment except for servicing or repair.

13. HEAVY EQUIPMENT

- A. Stay alert when working around heavy equipment (i.e. dozers, excavators, rough terrain fork trucks, and cranes). The operator cannot always see other personnel around his equipment. Stay out from under suspended loads, away from moving equipment and swinging counterweights.
- B. Only designated individuals are permitted to operate or service heavy equipment.
- C. Perform frequent and periodic inspection as required and instructed.
- D. Equipment operators must wear their seatbelt if one is provided.
- E. Do not ride on any part of heavy equipment unless a seat and seatbelt are provided.
- F. Every employee is responsible for making sure that back-up alarms are working on heavy equipment that have an obstructed rear view. Use a flagger to move equipment when back up alarms are inoperable.
- G. Always maintain at least 10' minimum clearance from energized lines; use a spotter if necessary. *See Overhead Powerlines* for specific clearance requirements.

14. CONCRETE OPERATIONS

- A. Wear the following PPE when performing concrete operations:
 - (1) Rubber over-boots when working in wet concrete. Boots will be provided.
 - (2) Kneepads when finishing concrete.
 - (3) Gloves when installing or removing formwork.
 - (4) Hardhats when working around swinging concrete chutes and pump hoses.
 - (5) Respirator when sweeping, cutting or drilling into concrete. Consult your foreman to determine the appropriate respirator to use. *Refer to Silica Program* for additional information.
- B. Wash your hands at the wash station after handling concrete.
- C. Make sure all utilities have been shut off before drilling or cutting.
- D. Watch for moving traffic and heavy equipment when performing concrete pours on roadways. Always face the on-coming traffic and be aware of the float poles extending into active traffic lanes. Use a spotter if necessary.
- E. Be cautious when working around overhead power lines. Make sure the ends of float poles are kept at least 10' away from powerlines up to 50kV.

15. DEMOLITION OPERATIONS

- A. Before starting demolition operations, the foreman or another designated qualified person will conduct a survey to determine all the following:
 - (1) The condition of the building/structure;
 - (2) Whether adjacent structures will be affected by the demolition; and
 - (3) To check for any other conditions that may present a safety or health hazard (i.e. lead, asbestos, fire hazards).

A copy of the written survey report is kept in the field office.

- B. Manual demolition operations must be performed under the supervision of the foreman or another designated qualified person.
- C. Make sure all utilities have been shut off before demolition operations.
- D. Never torch-cut painted steel unless it has been determined that it does not contain lead. *Refer to Lead Awareness Program* for more information.

- E. Asbestos must be removed by a certified abatement contractor prior to demolition. If you suspect or find asbestos material stop work and bring it to the attention of your foreman or superintendent.
- F. Do not use mechanical equipment on a floor or other working surface unless it can support the equipment and its intended load.
- G. Use curbs or stop logs to prevent mechanical equipment from tracking over an edge or into an opening.
- H. Use signs, barricades, or other barriers to keep workers out of demolition areas. Only the employees necessary to the operation of mechanical demolition are permitted in the demolition area.
- I. When feasible, use water to control dust that is created during the demolition process.

16. PILE DRIVING OPERATIONS

- A. Pile driver leads must be equipped with stop blocks to prevent the hammer from being raised against the head block.
- B. Make sure a blocking device (capable of supporting the hammer) is in place within the leads and under the hammer whenever you are working underneath the hammer.
- C. Guards must be installed across the top of the head block to prevent the cable from jumping out of the sheaves.
- D. A ladder shall be used to access fixed leads. In addition, rings or similar attachment points shall be provided on the leads, to attach a personal fall arrest lanyard when working aloft.
- E. All hammer and jet-pipe hose connections (steam and air) must be securely attached to the hammer with an adequate length of safety chain or ½" cable that will prevent the hose from whipping if the connection at the hammer is broken. Safety chains are also required at all hose coupling connections.
- F. Steam line controls must have two shutoff valves, one of which shall be a quick-acting lever type that is within easy reach of the hammer operator.
- G. Pile driving hammers must be lowered to the bottom of the leads while pile driver is being moved.
- H. A pile extractor must be used if piling cannot be pulled without exceeding the load rating of the equipment.
- I. Keep clear of piling when it is being hoisted into the leads.

17. AERIAL LIFTS

- A. Do not operate an aerial lift unless you have been trained and issued a permit by this company to operate that specific type of lift.
- B. At the beginning of each work shift, the aerial lift operator must perform an inspection of all the following <u>before</u> using it:
 - (1) Visually inspect the aerial lift for any defects that would affect its safe operation (i.e. cracked welds, bent or broken members, damaged controls and cables, loose wires, tires, fluid levels, and slippery conditions on the platform).
 - (2) Operate all the platform and ground controls to ensure they are working properly.
 - (3) Inspect the work area for ditches, drop-offs, holes, floor and overhead obstructions, debris, power lines, and clearances.

All unsafe items must be corrected before using the aerial lift.

- C. Maintain a minimum clearance distance of 10 feet from energized power lines (up to 50 kV) when operating an aerial lift. Clearance distances must be increased over 50 kV. Consult your foreman if you cannot maintain clearances.
- D. Use one of the following **fall protection systems** when operating an extendable or articulating boom-supported aerial lift:
 - (1) <u>Fall Arrest System</u>: Wear a safety harness and attach your lanyard to the designated anchor point that is provided on the equipment. The aerial lift must be designed to withstand the vertical and lateral loads imposed by an arrested fall.
 - (2) <u>Fall Restraint System</u>: Wear a body belt with a short (2') lanyard that will not stretch or "break" away. Attach the lanyard to the anchor point on the equipment so the operator is not exposed to any fall distance. A fall restraint system must be used when operating aerial lifts that are not designed to withstand the vertical and lateral loads caused by an arrested fall (typically smaller aerial lifts).
 - (3) Never attach your lanyard to an adjacent structure or equipment!
- E. Harnesses, body belts, and lanyards are not required when operating a scissor-type aerial lift unless exiting the lift from an elevated position to areas that are inaccessible or hazardous to reach. Always check with your foreman first before exiting an aerial lift while it is elevated.
- F. Operating Aerial Lifts Generally.
 - (1) Do not exceed the manufacturer's rated load capacity.

- (2) Elevate the platform only when the lift is set up on a firm and level surface or within the slope limits.
- (3) Use the outriggers or stabilizers, if provided by the manufacturer. Set the brakes and position the outriggers and stabilizers on pads or a solid surface.
- (4) Keep platform floors clean. Only employees, their tools and necessary materials are allowed on or in the platform.
- (5) Keep your feet on the platform! Don't use rails, ladders, planks, or any other material to achieve additional height while working on the platform.
- (6) Keep gates closed and chains secured when the platform is elevated.

G. Operating Aerial Lifts On or Adjacent to Roadways.

- (1) Ensure traffic control complies with Part 6 of the MMUTCD.
- (2) Maintain adequate clearance distances from active traffic lanes to ensure that any portion of the aerial lift (i.e. articulating and extensible booms), tools or material will not encroach into the active lanes during its operation.

H. Operating Aerial Lifts on Barges.

- (1) Ensure the maximum capacity of the barge will not be exceeded by the weight of the aerial lift (plus rated working load) imposing any potential damage, unexpected or excessive list, or overloading to the barge.
- (2) Review the aerial lift operating manual or manufacturer for any specific recommendations or requirements (i.e. wind speed, weather and water forecasts, load ratings). Check with your foreman if you have any questions or concerns.
- (3) Secure the aerial lift to the barge when the platform is elevated.

18. SCAFFOLDS

- A. Only designated qualified employees are allowed to erect or dismantle a scaffold.
- B. Make sure guardrails are in place on any open sides or ends of scaffold platforms that are 10' or more above the ground or floor before using it.
- C. Maintain at least 3' from energized insulated service drops (less than 300 volts) and at least 10' clearance from all other energized electric lines (insulated or uninsulated).
- D. Keep scaffolds free from excess tools, materials, and debris.

- E. Scaffolds must be inspected each day by a competent person. Damaged or weakened components (i.e. bent braces, split planks, broken platforms, unstable ground support) must be removed from service or repaired before use.
- F. If you notice any damaged components, missing guardrails or have other safety concerns regarding a scaffold, inform your foreman immediately.
- G. Every employee must be trained to recognize the hazards that are specific to the type of scaffold they are using.
- H. Refer to MIOSHA Construction Safety Standard Part 12 Scaffolds and Scaffold Platforms, manufacturer's recommendations, and engineering designs for additional information and specific requirements for scaffolding.

19. FALL PROTECTION

- A. Do not walk or work on any surface (i.e. platforms, roofs, and floors) that may be deteriorated, rotted, or not fully installed. Inform your foreman if you notice any defective walking/working surfaces. Walking and working surfaces must be inspected by the foreman (or other designated employee) to determine if the surfaces have the strength and structural integrity to support employees.
- B. Always make sure you are protected from falling at heights of 6' or more above a surface (i.e. ground, floor surface, water) with a *Guardrail*, *Personal Fall Arrest System*, *Restraint System*, or *Safety Nets*.

C. Guardrail Specifications

- (1) Guardrails must be installed along the edges of walking/working surfaces that are 6' or more above lower levels. If a guardrail is not installed, another fall protection system must be used to protect employees.
- (2) A guardrail consists of a top rail and a mid rail. Install a toe board when active work is taking place below.
- (3) Guardrails are typically constructed using 2' x 4' lumber or 3/8" wire rope cable. Never use rebar!
- (4) Install top rails/cables between 39"- 45" above the floor or lower working level.
- (5) Top rails must be strong enough to withstand at least 200 pounds applied outward or downward.
- (6) If wire rope cable is used, the top cables must be tight and not sag or deflect lower than 39" when pushing downward or outward, then flagged every 6' with high visibility material.

- (7) Install mid rails/cables halfway between the floor or lower working level and the top rail. They should be tight and strong enough to withstand 150 pounds applied outward or downward.
- (8) Support posts should be spaced not more than 8' apart for 2" x 4" guardrails. The ends of the top rails and mid rails should be flush with the support posts with no sharp edges or protruding nails. The support points for wire rope guardrails may be spaced farther apart.

D. Personal Fall Arrest System Specifications

- (1) A personal fall arrest system (PFAS) consists of three components: a harness, a lanyard or lifeline, and an anchor point.
- (2) Visually inspect your harness, lanyard, lifeline, and anchor point before each use for excessive wear, damage and deterioration. Remove defective equipment from service do not use!
- (3) Harnesses must fit properly not too loose, but not so tight you're your movement is constricted. Position the D-ring on the upper back near the shoulder level.
- (4) Only use properly rated lanyards, vertical lifelines, and connecting components that are designed to be used for fall protection. **Do not tie, shorten or knot lanyards!**
- (5) Only self-locking type snap hooks are allowed. **Do not** connect your snap hook to an object or structure unless the snap hook is designed for this type of connection. Check with your foreman if you have questions.
- (6) Horizontal lifelines must be designed, installed, and used under the supervision of the foreman or other designated qualified person. A horizontal lifeline system is typically designed by an engineer to ensure the system maintains a safety factor of at least two.
- (7) **Do not attach your lanyard or lifeline to a guardrail!** Lanyards and lifelines must be attached to an anchor point that can support at least 5,000 pounds per employee. Most guardrails are not designed to be used as an anchor point. Ask your foreman if you have any questions.
- (8) Prompt rescue must be planned and provided for employees wearing a PFAS unless the system is designed to rescue themselves. Employees, ladders, aerial lifts and equipment can be used to rescue an employee.

E. Restraint System Specifications

- (1) Restraint systems must be designed and installed to prevent an employee from being exposed to or reaching any fall hazard (i.e. edge of walking/working surface, floor openings).
- (2) Only fixed-type lifelines, lanyards and anchorages can be used for restraint systems. Deceleration devices and other components that are designed to break away, elongate, or lengthen when activated must not be used!
- (3) The components and equipment that are used for restraint systems must meet the same criteria as those used for personal fall protection systems (i.e. harnesses, snap hooks, lifelines, lanyards). Do not use miscellaneous ropes or secure with knots!
- (4) A restraint system must be secured to an anchor point that is fixed and strong enough to support at least two times the potential load imposed.

F. Safety Net Specifications

- (1) Only safety nets and installation component that are rated and designed as a fall protection system may be used.
- (2) Install safety nets as close as possible underneath the walking/working surface where employees are working, but never more than 30' below.
- (3) Safety nets must extend outward from the outermost projection of the walking/working surface as follows:

Vertical distance from working level	Minimum horizontal distance of outer edge of		
to horizontal plane of net	net from the edge of the working surface		
Up to 5'	8'		
More than 5' up to 8'	10'		
More than 10'	13'		

- (4) Install safety nets with sufficient clearance underneath them to prevent contact with the surface or structures below when performing drop tests.
- (5) Safety nets must have a drop test which is done by dropping a 400-pound bag of sand into the net from the highest point. Drop tests must be completed as follows:
 - a. After the initial installation and before being used.
 - b. Whenever the safety nets and components have been relocated.
 - c. After major repair.
 - d. At six-month intervals if left in one place.

If a drop test cannot be done, a competent person must certify (in writing) that the safety net and components meet the strength and clearance requirements. The certification record must be kept at the jobsite and include the location of the safety net and components, the date, and the signature of the person making the determination.

- (6) Remove any materials, scrap pieces, equipment and tools that have fallen into a safety net as soon as possible, but at least before the next work shift.
- (7) Inspect safety nets and components at least once a week for wear, damage, and other deterioration. Remove defective nets and components from service.

G. Floor Openings and Holes

- (1) Covers must be installed over floor openings and holes (2" or greater) that are 6' or more above lower levels. Larger holes can be protected by a guardrail.
- (2) Covers must support at least twice the maximum anticipated load of the weight of the vehicle, employees, equipment, and materials that may be imposed at any one time.
- (3) Make sure covers are sufficiently secured to prevent displacement from wind, equipment, and employees.
- (4) Identify covers with a high visible paint or marked with COVER or HOLE to warn workers of the hazard.
- (5) If a cover is removed to complete a task, make sure to re-install the cover immediately afterwards. Never leave the hole or opening unprotected.

H. Falling Object Protection

- (1) Always wear a *hard hat* when walking or working underneath areas where workers are working or otherwise exposed to falling objects.
- (2) If necessary, install toe boards, screens/panels, guardrails or canopies to prevent debris, material and tools from falling from the edges of overhead surfaces.

20. WORKZONE SAFETY

- A. Employees must wear the appropriate high-visibility safety apparel as prescribed below when working on a roadway or adjacent to vehicular traffic:
 - <u>Class 1</u>: High-visibility shirt or safety vest. (Daylight hours with good visibility)
 - <u>Class 2</u>: High-visibility <u>and</u> 360-degree reflective safety vest or jacket with contrasting colors. (*Daylight hours with good visibility*)

Note: Class 2 is the minimum MDOT requirement for working within the right-of-way on highways.

- <u>Class 3</u>: Apparel having more high-visibility background and 360-degree retroreflective material. Safety apparel includes safety vests or jackets, reflective pants, and reflective hard hat. (*Nighttime work and during low visibility conditions in daylight hours*)
- B. Always face oncoming traffic or use a spotter when working on a roadway or adjacent to vehicular traffic.

C. Traffic Control Devices.

- (1) Placing, removing, and maintaining traffic control devices shall be as prescribed in Part 6 of the Michigan Manual of Traffic Control Devices. MDOT may also develop specific traffic control plans for certain projects. Always check with your **foreman or the designated qualified person** to find out which traffic control plan and traffic control devices are being used for the project.
- (2) Work operations must be routinely inspected to ensure traffic control devices are being maintained. Replace damaged or displaced traffic control devices as soon as possible. If you have any questions or concerns with traffic control issues consult your **foreman or the designated qualified person**.
- (3) Cover up traffic control signs when work zones are not active. In addition, cover any permanent posted speed limit signs so they will not conflict with the temporary work zone posted speed limit signs.
- (4) If a moving vehicle is used to place or remove traffic control devices, use one of the following methods to prevent falling from the vehicle:
 - a. A seat with seatbelt.
 - b. A standard guardrail.
 - c. A guardrail section may be removed to facilitate handling of the devices. A hand hold must be provided.
 - d. When using a lower platform, any combination of top rails, mid rails, side rails, seats, toe boards, or other combination of equivalent safeguard may be used. A hand hold must be provided.
 - e. A positioning system that prevents an employee from falling from the vehicle. A hand hold must be provided.

21. TRAFFIC REGULATORS

- A. Always wear a hard hat, safety glasses, work boots and Class 2 or Class 3 high-visibility safety apparel when directing traffic (flagging).
- B. Use a hand-held STOP/SLOW paddle sign with a 6-foot staff. Red flags are only allowed when directing traffic during emergencies.

- C. Rest stools may be used under the following stipulations:
 - (1) Do <u>not</u> use rest stools in any portion of the open or closed traffic lanes.
 - (2) The rest stool must be at least 30" high with no arm or back supports.
 - (3) Communication equipment may be attached to the rest stool.
 - (4) Do not attach STOP/SLOW or STOP/STOP paddles to the rest stool.
- D. Traffic regulator stations shall be illuminated with a minimum intensity of 10 foot-candles during nighttime hours.
- E. Rules of Conduct for Traffic Regulators
 - (1) **Always pay attention to your surroundings!** Don't mingle with the work crew, traveling public or other people.
 - (2) Be alert to the traffic conditions and never turn your back to approaching vehicles.
 - (3) Recognize dangerous traffic situations and warn workers and other regulators in sufficient time to avoid injury.
 - (4) Plan a safe escape route to avoid being struck by an errant vehicle. Move quickly to avoid danger from errant vehicles.
 - (5) Do not abandon your traffic regulator station until a replacement traffic regulator arrives and is ready to assume traffic regulating duties.
 - (6) Do not sit in a parked vehicle when directing traffic or have another person sitting in the parked vehicle.
 - (7) Do not use cell phones to direct traffic unless instructed by your foreman.

22. UTILITY LOCATING – BEST PRACTICES

1. <u>Prior To Excavating.</u>

Contact the MISS DIG System at **800-482-7171** at least 72 hours in advance of construction, but not more than 14 calendar days. Retain your ticket number and be specific about the limits concerning the proposed area of excavation.

2. Positive Response.

All participating utility owners are required to notify MISS DIG via an automated response system. This useful tool will allow you to determine if all the utilities in your proposed area of excavation have been located. If a utility owner has no facilities in

the area, this information will also be part of the positive response. This information is administered by MISS DIG and available through the web at **www.missdig.org** or the automated phone system at **800-763-3888**.

3. No Marks.

If the excavator, having commenced excavation within the 14-calendar day period on or after the dig start date and time as set forth in the MISS DIG notice, has cause to be concerned about the presence of an unmarked facility(s) due to **any** of the following:

- (1) There is visible evidence of a facility(s),
- (2) A notified Facility Owner/Operator (FOO) failed to provide a positive response, or
- (3) A positive response exists that indicates a location was marked, but the marks are missing.

If any of the above exist, the excavator shall give notice to the potential unmarked FOO by contacting MISS DIG. Upon notification of this situation to MISS DIG, the FOO shall respond within three (3) hours; unless a later time-period for response is agreed upon by the excavator and the FOO.

4. Additional Assistance.

If the precise location of a marked facility cannot be determined and assistance is requested during normal working hours (7 a.m. to 5 p.m.) on a business day, the system facility owner has 3 hours to respond to the request or meet at a mutually agreed upon time. Requests for additional assistance must be made through MISS DIG: 800:482-7171.

5. Excavating.

Excavating must commence within **14 days** of the dig start date on the MISS DIG ticket. If excavating has not occurred within this time frame, a new ticket number must be obtained prior to excavating.

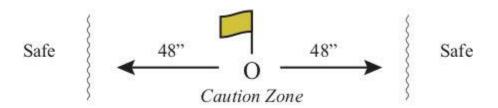
6. Safe Zone & Caution Zone

Your intended area of excavation has been divided into two areas as follows:

- (1) **Safe Zone** Relates to the area at least <u>48" or farther away</u> from either side of the mark(s) provided by the utility owner. No hand-digging or facility verification is required when excavating in the safe zone. Be sure to remain diligent regarding evidence of unmarked facilities.
- (2) **Caution Zone** Means the area <u>within 48" of either side</u> of the mark(s) provided by the utility owner. If excavating must occur within the caution zone, all facilities must be located prior to excavating by hand digging or other means of soft excavation. Excavations that run parallel to a facility in a caution zone

require hand dug test holes (i.e. pot holing) at intervals as often as reasonably necessary to establish the precise location of the underground facility. You may commence excavation with powered equipment in the caution zone once you have established the location of the facility.

7. <u>Safe Zone & Caution Zone Diagram</u>



8. <u>Markings</u>

Paint, stakes, and/or flags may be utilized to mark underground facilities. Often, a combination of all three are used to identify facilities. Color-coding is used to differentiate the various marks of facilities to be encountered. The following should help determine the type of facility being dealt with:

Yellow: Natural gas, oil, steam, petroleum, or other gases

Orange: Phone and cable

Red: Electric **Blue:** Water

Green: Storm drains

Brown: Sewer

23. EXCAVATIONS

A. Protecting Underground Utilities.

- (1) Do <u>not</u> begin excavating until MISS DIG has been called and all the requirements in *Utility Locating Best Practices* have been complied with.
- (2) Adequately support all utilities (i.e. gas lines, piping, structures) that have been exposed or disturbed by work operations.
- (3) If a utility is accidently struck or damaged during excavation work, inform the foreman immediately. All employees must evacuate the excavation if the damaged utility could present a dangerous situation (i.e. gas explosion, asphyxiation, electrocution). Any damage to a utility must be reported to the facility owner.

B. Inspections.

- (1) **Do not enter an excavation or trench unless instructed by your foreman!** Your **foreman or qualified person** must inspect each excavation or trench before employees can enter and on an ongoing basis for evidence of instability (i.e. cracks, slides, cave-ins, water, flaking) due to rainstorms or other potential hazards.
- (2) If hazardous conditions are found, work shall stop, and employees shall immediately exit the excavation until protective measures (i.e. additional shoring or cutting the slope back) have been taken. **Inform your foreman if you have safety concerns.**

C. General Excavation Requirements

- (1) Cave-in protection (sloping, shoring, sheeting, trench boxes) must be installed before entering an excavation more than 5'deep.
- (2) Keep spoil piles, rocks, debris, and material at least 2' back from the edge of the excavation.
- (3) Always wear a hard hat and stay within the protective system when working in an excavation or trench.
- (4) Never climb on shoring, trench shields, or sloped walls or ride on any bucket, lift, hook, chain, cable, sling, or other equipment parts.
- (5) Do not work in an excavation where water is accumulating unless precautions are taken, i.e. special shoring to protect against cave-ins or slides (i.e. trench box), pumps to control the water level, or use of safety harness and lifeline.
- (6) Do not work in an excavation with atmospheric hazards unless air quality testing has been conducted to determine the permissible exposure levels and proper protection (i.e. respirators and ventilation) is provided.

D. Access and Egress

- (1) Use a ladder or a ramp to get into or out of an excavation that is greater than 4' in depth.
- (2) Position the ladder or ramp within 25' laterally of where employees are working.
- (3) Ladders must be stable and extend 3' above the top of the excavation.
- (4) Earth ramps must be stable and constructed at a maximum 45° angle. Position the ramp no more than 30' from the bottom of the excavation.

(5) Manholes, pipes, and other similar structures are treated as **confined spaces**. Before employees can use these types of structures to travel though to access and egress an excavation, a **qualified person** must first perform an evaluation and test the atmospheres for oxygen content and combustible and toxic gasses to determine whether employees may be allowed to enter them. **Refer to Confined Space Program** for additional information.

E. Fall Protection for Excavations

- (1) **Don't leave open manholes unprotected!** Manholes must be covered or protected by a guardrail or barricading. If a temporary cover is used, it must be labeled, have sufficient strength, and secured down or composed of a material that will prevent it from being dislodged.
- (2) Stationary or long-term excavations that are 6' or more in depth (i.e. bore pits, wells, shafts) must be protected by guardrails, fences, barricades or covers.

F. Energized Lines

(1) Excavating equipment (i.e. excavators and backhoes) must maintain a minimum clearance distance from overhead energized lines as prescribed in the table below:

Minimum Clearance Distance for Excavating Equipment							
Voltage	Boom Raised	Boom Lowered & No Load					
to 50 kV	10 feet	4 feet					
50 to 345 kV	10 feet + 0.4 inches per kV over 50 kV	10 feet					
346 to 750 kV	10 feet + 0.4 inches per kV over 50 kV	16 feet					

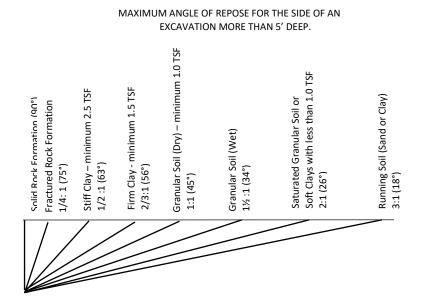
Refer to *Crane Safety Program* for specific clearance requirements for cranes.

(2) Use a spotter if it is difficult for the operator to maintain clearances by visual means. Spotters must maintain visual contact with the operator and limit their work activity to only spotting.

G. Sloping Requirements

(1) All trenches and excavations that are **more than 5' deep** must be cut back, sloped or benched to the proper angle of repose based on the type of soil and site conditions unless supported by sheeting or a shoring system. Use Chart A below to determine the proper angle of repose.

CHART A



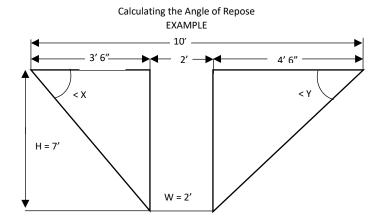
(2) The sides of the excavation must be flattened or cut back more than what is indicated in Chart A when the excavation is affected by water conditions, silty materials, loose boulders, erosion, frost, or slide plains.

H. <u>Determining the Type of Soil using a Penetrometer.</u>

- (1) Take several soil samples to determine the type and strength of the soil and to assist you in determining the proper angle of repose. Note: The penetrometer shows the strength of the soil in tons per square foot (TSF).
- (2) Take additional penetrometer readings if soil conditions change as the excavation gets deeper. Always make certain the employee performing the readings is protected.
- (3) Use the lowest penetrometer reading to determine the proper angle of repose. For example: If you took four penetrometer readings that varied between 1.5 2.5 TSF, the proper angle would be 56 degrees based on the 1.5 TSF reading.

- I. Calculating the Angle of Repose.
 - (1) Chart B demonstrates how to measure and calculate the angle of repose to determine if the sides of an excavation have been cut back or sloped properly to satisfy the requirements of Chart A.

CHART B



X = Tangent Angle (Left Side)

Y = Tangent Angle (Right Side)

H = Height

W = Width (at bottom of excavation)

$$X = \frac{H}{W} = \frac{7'}{3'6"} = \frac{7'}{3.5} = 2.0 = 63^{\circ} \text{ Angle}$$

$$Y = \frac{H}{W} = \frac{7'}{4'6"} = \frac{7'}{4.5} = 1.55 = 58^{\circ} \text{ Angle}$$

(2) Using the example above, refer to Chart C to convert the tangent angle into the angle degree.

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CHART C

TANGENT ANGLE = $\frac{H}{W}$ = DEGREE OF ANGLE FROM THE HORIZONTAL								
TANGENT	DEGREE	TANGENT	DEGREE	TANGENT	DEGREE			
0.000	0	0.577	30	1.732	60			
0.017	1	0.601	31	1.804	61			
0.035	2	0.625	32	1.881	62			
0.052	3	0.649	33	1.963	63			
0.070	4	0.675	34	2.050	64			
0.087	5	0.700	35	2.145	65			
0.105	6	0.727	36	2.246	66			
0.123	7	0.754	37	2.356	67			
0.141	8	0.781	38	2.475	68			
0.158	9	0.810	39	2.605	69			
0.176	10	0.839	40	2.748	70			
0.194	11	0.869	41	2.904	71			
0.213	12	0.900	42	3.078	72			
0.231	13	0.933	43	3.271	73			
0.249	14	0.966	44	3.487	74			
0.268	15	1.000	45	3.732	75			
0.287	16	1.036	46	4.011	76			
0.306	17	1.072	47	4.332	77			
0.325	18	1.111	48	4.705	78			
0.344	19	1.150	49	5.145	79			
0.364	20	1.192	50	5.671	80			
0.384	21	1.235	51	6.314	81			
0.404	22	1.280	52	7.115	82			
0.424	23	1.327	53	8.144	83			
0.445	24	1.376	54	9.514	84			
0.466	25	1.428	55	11.43	85			
0.488	26	1.483	56	14.30	86			
0.510	27	1.540	57	19.08	87			
0.532	28	1.600	58	28.64	88			
0.554	29	1.664	59	57.29	89			

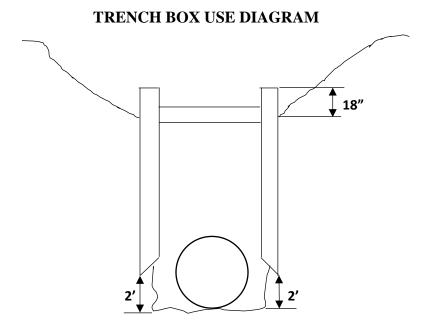
J. Benching Requirements.

(1) Benching can only be used when the soil has the minimum strength to sustain a 5' vertical side (i.e. stiff clay).

- (2) The vertical rise cannot be more than 5' and the step back must extend at least to the angle of repose as required in Chart 1.
- (3) The height of the lower bench shall not be more than the lesser of 5' or the width of the trench measured at the bottom.

K. Trench Boxes, Shoring, Shields and Sheeting.

- (1) Trench boxes, shoring, or sheeting are a safe and effective protective system and can be used in combination with sloping or benching. The **qualified person** will determine which type of protective system will be used. The trench box design (from the supplier or manufacturer) must be available on the job site.
- (2) Use a ladder or ramp to access the trench box.
- (3) Stay within the protective system (i.e. trench box, shoring, sloping, sheeting) when you are working in an excavation.
- (4) Exit the trench box while it is being installed, removed, or moved.
- (5) The toe (bottom) of the trench box must not be more than 2' above the bottom of the trench unless suitable protection is provided below the bottom of the trench box.
- (6) The sides of the excavation must be kept at least 18" below the top of the trench box. Any soils above the trench box must be properly sloped. See diagram below.



(7) Refer to Sloping, Benching, & Shoring Designs for additional examples.

HAZARD COMMUNICATION PROGRAM

MICHIGAN RIGHT TO KNOW LAW (RTK)

1. GENERAL

A. The foreman or superintendent will keep a copy (electronic or hard copy) of this program on each jobsite for employees to review.

2. HAZARD CLASSIFICATION

A. All employees must rely on the Safety Data Sheets (SDSs) obtained from the product manufacturer or its suppliers to determine which chemicals are classified as hazardous.

3. LABELING

- A. The foreman or superintendent is responsible for making sure all containers entering the jobsite are properly labeled. All labels shall be checked for:
 - (1) Product identity;
 - (2) Signal word;
 - (3) Hazard statement(s);
 - (4) Pictogram(s);
 - (5) Precautionary statement(s); and
 - (6) Name, address, and telephone number of the chemical manufacturer, supplier, or other responsible party.
- B. The foreman or superintendent is responsible for requesting labels (in writing) from the manufacturer or supplier for all shipments arriving at the jobsite without labels.
- C. The foreman or superintendent is responsible for making sure that all portable or secondary containers used on the jobsite are labeled with the product identity and providing employees with the specific information regarding the physical and health hazards associated with chemical.

4. SAFETY DATA SHEETS (SDS)

- A. The Safety Director is responsible for compiling and maintaining the master SDS file at the main office.
- B. The foreman or superintendent will provide copies of SDSs for all hazardous chemicals to which employee(s) may be exposed to any employees upon request.

C. The foreman or superintendent will post the *Michigan Right to Know Law* posters at each jobsite. The posters must identify the person responsible for maintaining SDSs and where the SDSs are located. Posters notifying employees when new or revised SDSs will be in the same location.

5. EMPLOYEE INFORMATION AND TRAINING

- A. The Safety Director is responsible for coordinating and maintaining records of employee hazard communication training.
- B. Before starting work, or as soon as possible thereafter, each new employee will attend a safety briefing which will include the following information and training:

(1) Information:

- a. Hazard Communication requirements.
- b. Work operations on the jobsite where hazardous chemicals are present.
- c. Where to locate the Company Hazard Communication Program, list of hazardous chemicals and from whom they may obtain a copy of the SDS's.

(2) Training:

- a. Methods to use for reducing or preventing exposure to these chemicals during work activities.
- b. Instructions regarding the physical and health hazards, as well as hazards that are not classified, of the chemicals present in the work area.
- c. Procedures to protect themselves from chemical hazards if exposed.
- d. How to read & interpret labels & SDSs.
- e. How to obtain and use hazard information.
- C. Inform the new employee that employers are prohibited from discharging, or discriminating against, an employee who exercises the rights regarding information about hazardous chemicals in the workplace.
- D. Attendance will be taken at all safety briefings or training sessions. The records will be kept by the Safety Director.
- E. Before a new hazardous chemical is introduced into the workplace, each employee will be given information in the same manner as during the safety briefing.

6. HAZARDOUS NON-ROUTINE TASKS

- A. On occasion, employees may be required to perform non-routine tasks in a potentially hazardous area (e.g. confined spaces). Prior to working in such areas, each employee must receive a safety briefing that includes the following information about the hazards involved:
 - (1) Specific chemical hazards.
 - (2) Protective safety methods the employee can take to reduce risks.
 - (3) Measures the company has taken to reduce the hazards including air monitoring, ventilation requirements, use of respirators, use of attendants to observe procedures, and emergency procedures.

7. INFORMING CONTRACTORS ON MULTI-EMPLOYER WORKSITES

- A. The Safety Director is responsible for providing each subcontractor who has employees working on the jobsite that could be exposed to our chemicals with the following information:
 - (1) Hazardous chemicals used at the jobsite that employees may encounter.
 - (2) Measures the employees may take to lessen the risks.
 - (3) Where to obtain a copy of the SDS for the hazardous chemicals
 - (4) Location of SDS list.
- B. The Safety Director is responsible for obtaining chemical information from contractors when they bring hazardous chemicals into our workplace that could expose or harm our employees.

8. PIPES AND PIPING SYSTEMS

A. The foreman or superintendent shall ensure that facilities have been properly labeled on all pipes and piping systems containing hazardous chemicals, natural gas, steam and compressed air lines (exceeding 25 psig) when our employees may be exposed to this hazard during their work operation.

9. LIST OF HAZARDOUS CHEMICALS

A. The list of the chemicals used by this company can be obtained by reviewing the SDSs or by contacting the Safety Director.

RECORDKEEPING REQUIREMENTS

1. RECORDING INJURIES AND ILLNESSES

- A. Work-related injuries and illnesses that result in death, days away from work, restricted work or transfer to another job, medical treatment beyond first-aid, or loss of consciousness must be **recorded** and **maintained** by the company Safety Director as follows:
 - (1) Document each recordable injury or illness on an *Incident Report Form* and maintain a copy of the report at the main office.
 - (2) Log each recordable injury or illness on the company OSHA Form 300 "Log of Work-Related Injuries and Illnesses." Keep the log updated and maintained at the main office.

Note: Form 300 log is not required for companies having 10 or fewer employees (company-wide) during the last calendar year.

B. Compile a summary of all recordable injuries and illnesses at the end of each calendar year using the OSHA Form 300A "Summary of Work-Related Injuries and Illnesses." Post a copy of the summary at each jobsite no later than February 1st and keep posted until April 30th.

Note: Form 300A is not required for companies having 10 or fewer employees (company-wide) during the last calendar year.

2. MIOSHA REPORTING RESPONSIBILITIES

- A. <u>Hospitalizations</u>, <u>Amputations</u>, and <u>Loss of an Eye</u>. All employers (regardless of size of company) must report a work-related in-patient hospitalization of an employee(s), amputation, or loss of an eye to MIOSHA **within 24 hours** of the event.
- B. <u>Fatalities</u>. All employers (regardless of size of company) must report a work-related fatality to MIOSHA **within 8 hours** of the event.
- C. <u>Reporting Methods</u>. Use <u>one</u> of the following methods for reporting a hospitalization, amputation, loss of an eye or fatality to MIOSHA:
 - (1) Call the MIOSHA Construction Safety and Health Division office (only if office is open) at 517-284-7680 or 1-800-866-4674.

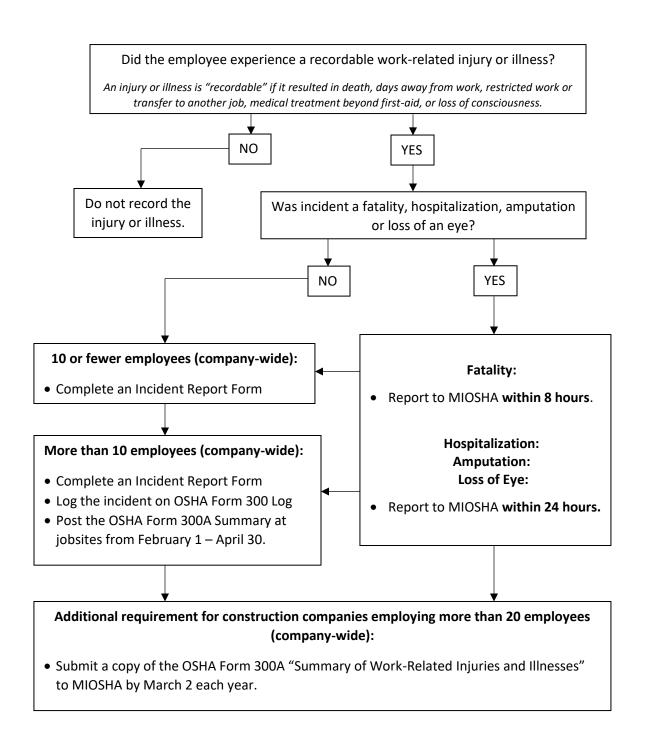
Note: Only use this method if the office is open. Do not leave messages on an answering machine, send a fax, or send an email.)

- (2) Call MIOSHA toll-free number at: 1-844-464-6742 (Severe Injuries) or 1-800-858-0397 (Fatality).
- (3) Submit an electronic application located on the MIOSHA website at www.michigan.gov/recordkeeping.
- D. <u>Required Information</u>. The following information shall be provided when reporting a hospitalization, amputation, loss of an eye, or fatality to MIOSHA:
 - (1) Company Name
 - (2) Location of the work-related incident
 - (3) Time the incident occurred
 - (4) Type of event (i.e. fatality, inpatient hospitalization, amputation, or loss of eye)
 - (5) Number of employees affected
 - (6) Name(s) of employees affected
 - (7) Company contact person and his/her phone number
 - (8) Brief description of the work-related incident.

3. ELECTRONIC SUBMISSION OF INJURY/ILLNESS RECORDS TO MIOSHA

- A. Companies with **250 or more employees** must electronically submit the following three recordkeeping forms to MIOSHA for each calendar year no later than March 2nd of the following year.
 - (1) MIOSHA Form 300A "Summary of Work-Related Injuries and Illnesses."
 - (2) MIOSHA Form 300 "Log of Work-Related Injuries and Illnesses."
 - (3) MIOSHA Form 301 "Injury and Illness Incident Report" or equivalent form (i.e. *Incident Report Form*)
- B. Construction companies with **20 or more employees but fewer than 250 employees** must electronically submit MIOSHA Form 300A "Summary of Work-Related Injuries and Illnesses" for each calendar year no later than March 2nd of the following year.
- C. Refer to MIOSHA Administrative Rule Part 11. Recording and Reporting of Occupational Injuries and illnesses for additional information.
- D. Refer to the Recording and Reporting Flowchart below for additional assistance.

RECORDING AND REPORTING FLOWCHART



Mobile Device Policy

1. APPLICABILITY

- A. This policy applies to mobile cell phone usage (personal and employer-issued) and listening devices when working on a jobsite regardless whether the cell phones or listening devices are hand-held or being used hands-free (i.e. Bluetooth earphones, earbuds, and headphones).
- B. The term "cell phone usage" means making or receiving phone calls, texting, messaging, checking emails, checking social media, taking photos and videos, or any other similar activities.

2. CELL PHONES

- A. Only foremen, superintendents, or other designated qualified persons are allowed to use mobile cell phones on jobsites or during working hours. Any exceptions to this policy must be approved by Management.
- B. Employees may use personal cell phones during breaks or lunch times in a safe location away from active work operations (i.e. jobsite trailer or parked vehicle).
- C. Personal cell phone ringers must be turned off or set to mute or vibrate during work hours.

3. LISTENING DEVICES

A. Listening devices (i.e. radios, portable CD players, iPods and other similar listening devices) are strictly prohibited on jobsites.

4. SAFE PRACTICES FOR CELL PHONES (WHEN APPROVED)

- A. Use cell phones in a safe manner that does not expose the user and others to any recognizable hazard.
- B. Do not use cell phones, radios, and other devices when they could distract you from warning alarms and other approaching hazards. Move to a safe location before answering the call.
- C. Turn cell phones off or set to "silent" or "vibrate" before starting vehicles.
- D. Pull over to a safe place when making or receiving calls while on the road.
- E. Modify your voicemail greeting to indicate unavailability to answer calls or return messages while driving.

DISCIPLINARY POLICY

SAFETY IS EVERYONE'S RESPONSIBILITY

Management is responsible for implementing safety and health policies and procedures and providing employees with the proper tools, equipment, training, and instruction to maintain a safe and healthy workplace that is free from recognized hazards. **Foremen and Superintendents** are responsible for identifying and eliminating potential hazards at the jobsite, ensuring employees are working safely, and communicating safety policies and procedures before starting work on a project. **Employees** are responsible for following the company's safety and health policies and procedures, not engaging in unsafe behaviors, and reporting unsafe conditions to the foreman.

A violation of company safety and health policies and procedures will result in disciplinary action up to and including discharge. To ensure compliance with this policy, the following schedule of disciplinary action will be implemented when safety or health rules are not followed, or other unsafe actions occur that could endanger yourself or other workers:

First Offense: Verbal warning.

Second Offense: Written reprimand.

Third Offense: Written reprimand *and* 1-3 working day(s) suspension without

pay.

Fourth Offense: Written reprimand and one-week suspension without pay,

or termination if warranted.

Zero-Tolerance Offense: Some offenses are of such serious nature that there will be no

warnings and termination may result. This applies to both the

employee and the foreman.

All disciplinary actions shall be documented and filed in employee's personnel file effective for one year from date of offense.

The foreman or superintendent shall retrain the employee on the safety rule or policy that resulted in the disciplinary action before allowing the employee to return to work.

EMPLOYEE DISCIPLINE REPORT

Employee:	Date: _	
Project Name or Locati	ion:	
Description of conditio	ns and/or employee actions that led to disciplina	ary action:
What is the company p	olicy or work rule for the violation?	
Was employee trained Action taken to correct	in the policy or safety rule prior to offense?	Yes □ No
Discipline Action Take	n:	
☐ First Offense:	Verbal warning	
☐ Second Offense:	Written Reprimand	
☐ Third Offense:	Written Reprimand <u>and</u> Suspension # o	f Days (1-3)
☐ Fourth Offense:	Written Reprimand <u>and</u> one of the following:	
	☐ Suspension (one work week)	
	☐ Termination	
☐ Deliberate Seriou	s Act: Immediate Termination	
Was employee retraine	d on the policy or safety rule? ☐ Yes ☐ No	Date:
Report Issued By:		Date:
Employee Signature		Date

INCIDENT INVESTIGATION REPORT

COMPLETE THIS SECT	ION FOR <u>ALL</u> INCIDENTS
Jobsite Location:	
Date of Incident:	Time of Incident:
☐ Personal Injury ☐ Propert	y Damage ☐ Near Miss
Describe Incident:	
Action Taken:	
Comments & Recommendations:	
COMPLETE THIS SECTION FOR PE	ERSONAL INJURY INVESTIGATIONS
Injured Employee:	Type of Injury:
Type of Treatment: ☐ First Aid ☐ Sent t	o Physician Hospitalization
Witnesses:	Witness Statement: ☐ YES ☐ NO
	Witness Statement: ☐ YES ☐ NO
Photos: ☐ YES ☐ NO	
COMPLETE THIS SECTION FOR PR	OPERTY DAMAGE INVESTIGATIONS
Describe Equipment Damage:	
Witnesses:	Witness Statement: ☐ YES ☐ NO
	Witness Statement: ☐ YES ☐ NO
THE PERSON FILLING OUT THIS REP	PORT MUST COMPLETE THIS SECTION
Incident Report Sent to Company Safety Director:	☐ YES (Attach photos and witness statements.)
Name:	Title: Date:

FOREMAN SAFETY CHECKLIST

Foreman:	Date:				
Inspected By:	Job Location:				
		YES	NO	N/A	
1. General Requirements					-
Emergency phone numbers pos	sted.				-
MIOSHA Rights and Responsib	pilities poster.				-
• RTK posters (2) and SDS availa	ble.				_
First Aid/CPR certified employ	ee on job site.				_
• First-aid kit available.					
Drinking water with cups avail	able.				
Toilet facilities available.					
Hand washing station available	·.				_
Safety and Health Program ava	ilable.				
New employee orientation con	ducted.				_
Weekly 10-minute safety talks	(Tool Box Talks).				
Housekeeping maintained; floo	rs swept; debris disposed.				
Hazardous areas barricaded.					
 Confined spaces identified; atm (Refer to Confined Space Policy 	_				
2. Personal Protective Equipment (P	PPE)				
• Hard Hats					
Eye Protection					_
Hearing Protection					-
Hand Protection					

		YES	NO	N/A
	Foot Protection: Specify			
	Protective Clothing: Specify			
3.	Powerlines			
	Maintaining minimum clearances of 10' from powerlines.			
	Spotter used to maintain minimum clearances.			
	Material not being stored under powerlines.			
4.	Fire Protection			
	2A fire extinguisher available on jobsite.			
	• 2A-10BC fire extinguisher within 75 feet of refueling areas.			
	• NO SMOKING signs posted at refueling stations; and flammable and combustible storage areas.			
	Approved safety-type containers used to transport gasoline.			
	Oxygen and fuel gas cylinders separated properly.			
	Cylinders secured and stored properly.			
5.	Welding and Cutting			
	Proper PPE worn.			
	Backflow devices in place.			
	• Flammables/combustibles kept at least 50' away from welding operations.			
	• 2A-10BC fire extinguisher in the immediate welding area.			
6.	Tools			
	Portable electric tools protected by an approved GFCI.			
	• Extension cords are three-prong type and in good condition.			
	Hand tools in good condition, no cracked or splintered handles.			

	YES	NO	N/A
Defective or damaged tools tagged and removed from service.			
Electrical sources turned off, tagged and locked out (i.e. jack hammering, equipment repairs).			
 Protective guards on portable saws and grinders in place. 			
Air tool connections secured with safety chains.			
Portable lights maintained and equipped with bulb guards.			
Ladders in good condition and set up properly.			
7. Heavy Equipment and Trucks			
Back up alarms in good working order or flagger used.			
 Parking brakes set when not in use. 			
10 BC fire extinguisher available in crane and excavator cab.			
Type ABC fire extinguishers available in trucks.			
All horns and lights in good working order.			
Seats firmly secured on vehicles used to transport employees.			
 Roll over protection and seat belts in good order. 			
Equipment safety chains in good order and in use.			
A copy of most recent equipment inspection checklist available.			
Vehicle registration and insurance paperwork in all trucks.			
Equipment and vehicle properly lubricated and maintained.			
Windshield void of cracks; wipers and defoggers operable.			
8. Handling and Storage of Materials			
 Rigging equipment inspected before use (i.e. hooks not stretched or twisted, slings in good condition). 			
 Chains are alloy steel with permanent tag showing size, grade, rated capacity and manufacturer's name. 			
 Material secured (i.e. stacked, raked, blocked, interlocked) to prevent sliding, falling or collapse during storage or transit. 			

	YES	NO	N/A
9. Fall Protection			
• Employees protected from falls at heights 6' or more.			
• Employees protected from a fall from scaffold at 10' or more.			
Manholes and floor holes/openings properly covered & marked.			
10. Work Zones			
 Advance warning signs installed and maintained properly. 			
• Traffic barricades and cones installed and maintained properly.			
 Employees working on roadway or in work zone wearing proper high visibility safety vests/apparel. 			
• Traffic Regulator Station set up properly (i.e. advance warning signs, SLOW/STOP paddles, 6' staff, and illuminated at night).			
 Traffic regulator(s) wearing hard hat, safety glasses, work boots and proper high visibility safety apparel. 			
• Traffic regulators used to assist work vehicles in/out of traffic.			
11. Excavations, Trenching, Shoring, Pipe Laying			
MISS DIG contacted, and utilities marked prior to excavating.			
 Qualified person making periodic inspections of soil conditions and shoring systems. 			
 Excavations with potential hazardous atmospheres tested and ventilated in accordance to the Confined Space Policy. 			
 Excavations and trenches more than 5' deep are properly sloped, shored, sheeted, and/or protected by a trench box. 			
 Materials used for shoring in good working condition; trench box inspected for broken welds. 			
• Excavated soil and material stored 2' from edge of excavation.			
• Employees wearing proper PPE (i.e. hard hats, eye protection)			
 Ladder or ramp used for access and egress within 25' laterally for excavations over 4' deep. 			

	YES	NO	N/A
Bore pits and excavations 6' or more are guarded properly.			
Manhole covers are in place or properly guarded.			
Existing utilities (i.e. pipes, gas lines) are adequately supported.			
Excavating equipment at least 10' from overhead powerlines.			
 DANGER signs posted on swinging counterweights of cranes & excavators. 			
Remarks:			

This Workplace Covered by the Michigan Right To Know Law

Employers must make available for employees in a readily accessible manner, Safety Data Sheets (SDS)* for those hazardous chemicals in their workplace.

Employees cannot be discharged or discriminated against for exercising their rights including the request for information on hazardous chemicals.

Employees must be notified and given direction (by employer posting) for locating Safety Data Sheets and the receipt of new or revised SDS(s).

"When the employer has not provided a SDS, employees may request assistance in obtaining SDS from the:

Michigan Department of Licensing and Regulatory Affairs Michigan Occupational Safety & Health Administration General Industry Safety & Health Division (517) 284-7750 Construction Safety & Health Division (517) 284-7680 www.michigan.gov/miosha MIOSHAVCET #2105 (Rev. 08/15)

MIOSHA



SDS(s) For This Workplace Are Located At

Location(s)

Location(s)

Person(s) responsible for SDS(s)

Phone

LARA is an equal opportunity employer/program.

As Required by the Know Law Michigan Right To

WORKPLACE NEXT TO THE SAFETY DATA SHEETS (SDS) LOCATION POSTERS TO BE POSTED THROUGHOUT THE

New or Revised

Location of New or Revised SDS

Posting Date

Receipt Date

New or Revised





For further information visit our website at: www.michigan.gov/miosha

LICENSING AND REGULATORY AFFAIRS CUSTOMER DRIVEN. BUSINESS MINDED Michigan Department of Licensing and Regulatory Affairs Michigan Occupational Safety & Health Administration Consultation Education & Training Division (517) 284-7720

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COMPANY NAME & LOGO

EMPLOYEE SIGN-OFF SHEET

__EMPLOYEE NAME____

understand this compa	Company Name	n and policies and may
Furthermore, I unders including my own, an	Safety Director for clarification tand that safety and health is even will immediately report any safety director, or management	eryone's responsibility, afety or health concerns to
Signed:		
Date:		