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**A. SAFETY POLICY**

It is our policy to prevent injury to our employees, our customers and the public. It is our responsibility, both as a Company and as individuals, to ensure a safe working environment. We see this as a moral, imperative and economic necessity. Our vision is driven by the achievement of an injury free workplace - the "zero injury concept" We will implement accident prevention through its superintendents, engineers and project managers. Ultimately, every member of our Company is accountable for the practice of safety; and is responsible, not only for their own safety, but also for that of their colleagues. They are expected to work conscientiously in regard to everything that surrounds them. In fact, the concern for safety is inherently related to doing the work itself and a portion of what wages are received for.

We assert that there is an undeniable relationship between safety, quality workmanship and production; this makes competitive sense and is advertising in its own right. It is the policy of the management of this Company to dedicate itself to providing safe working conditions and to protect our employees from hazardous encounters. Conversely, it is expected of all employees to work in a manner that will prevent injury and undue exposure to themselves and to their fellow employees.

All injuries or incidents, regardless of how small, must be reported immediately and treated at once. An incident report will be submitted to the main office promptly. All violations of common safety guidelines are violations of Federal and State Laws; and also those of this Company. Failure to comply will result in disciplinary action and the possible discharge of any employee not complying with them.

Our safety and health concerns will include:

1. Conducting a program of safety and health inspections to find and eliminate unsafe working conditions or practices. An inspection checklist will be used.

2. Training all employees in good safety and health practices, providing necessary personal protective equipment and instruction and developing and enforcing safety and health rules and regulations.

3. Investigating, promptly and thoroughly, every accident using the Incident Report.

4. Encouraging suggestions and vigilance to aid in safety concerns.

5. First aid kits will be kept on all Jobsites.

6. The attendance at safety seminars and first aid classes will be encouraged of all employees.

7. Tool-box talks relevant to work will be discussed weekly and logged.

8. Relevant issues will be given additional attention monthly.

**B. EMERGENCY PROCEDURES FOR ACCIDENTS**

PROVIDE A PREPARED LIST OF MEDICAL & EMERGENCY ASSISTANCE TELEPHONE NUMBERS (POSTED ON JOBSITE).

SPECIFIC DIRECTIONS TO THE JOBSITE IS TO BE CALLED INTO 911 IN CASE OF EMERGENCY.

THE SUBCONTRACTOR SHALL PROVIDE ALL INJURED PERSONNEL PROPER FIRST AID ATTENTION OR SEND THEM TO A RECOGNIZED MEDICAL FACILITY.

ACCIDENTS WHICH RESULT IN INJURIES REQUIRING HOSPITALIZATION, OR A FATALITY, SHALL BE REPORTED IMMEDIATELY TO THE OFFICE.

WRITTEN ACCIDENT REPORTS ARE TO BE FILED AT THE OFFICE WITHIN TWENTY-FOUR (24) HOURS AFTER ACCIDENT.

**C. HAZARDS AND SOLUTIONS**

**Scaffolding**

**Hazard:** When scaffolds are not erected or used properly, fall hazards can occur.

**Solutions:**

1. Scaffold must be sound, rigid and sufficient to carry its own weight plus four times the maximum intended load without settling or displacement. It must be erected on solid footing.

2. Unstable objects, such as barrels, boxes, loose bricks or concrete blocks must not be used to support scaffolds or planks.

3. Scaffold must not be erected, moved, dismantled or altered except under the supervision of a competent person.

4. Scaffold must be equipped with guardrails, midrails and toeboards.

5. Scaffold accessories such as braces, brackets, trusses, screw legs or ladders that are damaged or weakened from any cause must be immediately repaired or replaced.

6. Scaffold platforms must be tightly planked with scaffold plank grade material or equivalent.

7. A “competent person” must inspect the scaffolding and, at designated intervals, re-inspect it.

8. Rigging on suspension scaffolds must be inspected by a competent person before each shift and after any occurrence that could affect structural integrity to ensure that all connections are tight and that no damage to the rigging has occurred since its last use.

9. Synthetic and natural rope used in suspension scaffolding must be protected from heat-producing

10. Our employees must be instructed about the hazards of using diagonal braces as fall protection.

11. Scaffold can be accessed by using ladders and stairwells.

12. Scaffolds should be set on sound footing.

13. Damaged parts that affect the strength of the scaffold are taken out of service.

14. Scaffolds are not altered.

15. All scaffolds should be fully planked.

16. Scaffolds are not moved horizontally while workers are on them unless they are designed to be mobile and workers have been trained in the proper procedures.

17. Employees are not permitted to work on scaffolds when covered with snow, ice, or other slippery materials.

18. Scaffolds are not erected or moved within 10 feet of power lines.

19. Employees are not permitted to work on scaffolds in bad weather or high winds unless a competent person has determined that it is safe to do so.

20. Ladders, boxes, barrels, buckets or other makeshift platforms are not used to raise work height.

21. Extra material is not allowed to build up on scaffold platforms.

22. Scaffolds should not be loaded with more weight than they were designed to support.

23. All scaffold work platforms and walkways shall be designed, constructed and maintained to support four times the maximum weight they are expected to support when in use.

24. All scaffold platforms and walkways shall have top railings, mid-railings and toe boards in conformance with required Federal and State standards.

25. All work platforms and walkways shall be fully planked at all times work is in progress.

26. Adequate overhead protection shall be provided for men working on scaffolds if work is being carried on above them.

27. Scaffolds shall be free of ice, snow, oil and other slipping materials before being used.

28. Fixed scaffolds shall be secured to the building structure at 25-foot intervals both vertically and horizontally.

**C. HAZARDS AND SOLUTIONS**

**Fall Protection**

**Hazard:**

Each year falls consistently account for the greatest number of fatalities in the construction industry. A number of factors are often involved in falls, including unstable working surfaces, misuse or failure to use fall protection equipment and human error. Studies have shown that using guardrails, fall arrest systems, safety nets, covers and restraint systems can prevent many deaths and injuries from falls.

**Solutions:**

1. Consider using aerial lifts or elevated platforms to provide safer elevated working surfaces;

2. Erect guardrail systems with toeboards and warning lines or install control line systems to protect workers near the edges of floors and roofs;

3. Cover floor holes; and/or

4. Use safety net systems or personal fall arrest systems (body harnesses).

5. Floor openings (12 inches or more) are guarded by a secured cover, a guardrail or equivalent on all sides (except at entrances to stairways).

6. Elevated Surfaces

a. Signs are posted, when appropriate, showing the elevated surface load capacity.

b. Surfaces elevated more than 48 inches above the floor or ground have standard guardrails.

c. All elevated surfaces (beneath which people or machinery could be exposed to falling objects) have standard 4-inch toeboards.

d. A permanent means of entry and exit with handrails is provided to elevated storage and work surfaces.

e. Material is piled, stacked or racked in a way that prevents it from tipping, falling, collapsing, rolling or spreading.

**C. HAZARDS AND SOLUTIONS**

**Ladders**

**Hazard:**

Ladders and stairways are another source of injuries and fatalities among construction workers. OSHA estimates that there are 24,882 injuries and as many as 36 fatalities per year due to falls on stairways and ladders used in construction. Nearly half of these injuries were serious enough to require time off the job.

**Solutions:**

1. Use the correct ladder for the task.

2. Have a competent person visually inspect a ladder before use for any defects such as:

a. Structural damage, split/bent side rails, broken or missing rungs/steps/cleats and missing or damaged safety devices;

b. Grease, dirt or other contaminants that could cause slips or falls;

c. Paint or stickers (except warning labels) that could hide possible defects.

3. Make sure that ladders are long enough to safely reach the work area.

4. Mark or tag (“Do Not Use”) damaged or defective ladders for repair or replacement, or destroy them immediately.

5. Never load ladders beyond the maximum intended load or beyond the manufacturer's rated capacity.

6. Be sure the load rating can support the weight of the user, including materials and tools.

7. Avoid using ladders with metallic components near electrical work and overhead power lines.

8. Only ladders in good condition, which meet approved standards, shall be used on the jobsites.

9. All straight and extension ladders shall be equipped with proper feet and secured to prevent slipping.

10. Only wood, fiber glass, or other non-electrical conducting ladders shall be used.

11. Ladders shall be inspected on a regular basis. All ladders that do not meet approved standards shall be immediately removed from the jobsite.

12. All ladders shall be used in a safe manner in compliance with all approved Federal, State and Local standards.

**C. HAZARDS AND SOLUTIONS**

**Stairways**

**Hazard:**

Slips, trips and falls on stairways are a major source of injuries and fatalities among construction workers.

**Solutions:**

1. Stairway treads and walkways must be free of dangerous objects, debris and materials.

2. Slippery conditions on stairways and walkways must be corrected immediately.

3. Make sure that treads cover the entire step and landing.

4. Stairways having four or more risers or rising more than 30 inches must have at least one handrail.

5. Temporary treads must be securely fastened and are not movable or raised to prevent trip hazards.

**C. HAZARDS AND SOLUTIONS**

**Trenching**

**Hazard:**

Trench collapses cause dozens of fatalities and hundreds of injuries each year.

**Solutions:**

1. Never enter an unprotected trench.

2. Always use a protective system for trenches feet deep or greater.

3. Employ a registered professional engineer to design a protective system for trenches 20 feet deep or greater.

4. Protective Systems:

a. Sloping to protect workers by cutting back the trench wall at an angle inclined away from the excavation not steeper than a height/depth ratio of 1-1/ 2 :1, according to the sloping requirements for the type of soil.

b. Shoring to protect workers by installing supports to prevent soil movement for trenches that do not exceed 20 feet in depth.

c. Shielding to protect workers by using trench boxes or other types of supports to prevent soil cave-ins.

d. Subcontractor shall provide temporary substantial guardrails, signals, pennants, flagmen or other appropriate warning devices to protect personnel and traffic from any hazardous operation or excavation.

5. Always provide a way to exit a trench--such as a ladder, stairway or ramp--no more than 25 feet of lateral travel for employees in the trench.

6. Keep spoils at least two feet back from the edge of a trench.

7. Make sure that trenches are inspected by a competent person prior to entry and after any hazard increasing event such as a rainstorm, vibrations or excessive surcharge loads.

8. Before excavations, trenching and penetrations of the earth are begun, call MISS DIG.

9. When any underground interference is encountered, whether shown on drawings or not excavation shall cease immediately and shall not resume until the interference is identified and the necessary precautions are taken.

10. Hand excavating or probing to verify the location of underground lines shall be required.

11. Open trenches, excavations, floor openings etc., shall be covered when barriers do not provide effective protection.

12. Barriers shall be so marked as to be visible day and night.

SLOPING. Maximum allowable slopes for excavations less than 20 ft. (6.09 m) based on soil type and angle to the horizontal are as follows:

**C. HAZARDS AND SOLUTIONS**

**Cranes**

**Hazard:**

Significant and serious injuries may occur if cranes are not inspected before use and if they are not used properly. Often these injuries occur when a worker is struck by an overhead load or caught within the crane's swing radius. Many crane fatalities occur when the boom of a crane or its load line contact an overhead power line.

**Solutions:**

1. Check all crane controls to insure proper operation before use.

2. Inspect wire rope, chains and hook for any damage.

3. Know the weight of the load that the crane is to lift.

4. Ensure that the load does not exceed the crane's rated capacity.

5. Raise the load a few inches to verify balance and the effectiveness of the brake system.

6. Check all rigging prior to use; do not wrap hoist ropes or chains around the load.

7. Fully extend outriggers.

8. Do not move a load over workers.

9. Barricade accessible areas within the crane's swing radius.

10. Watch for overhead electrical distribution and transmission lines and maintain a safe working clearance of at least 10 feet from energized electrical lines.

11. Cranes and derricks are restricted from operating within 10 feet of any electrical power line.

12. The upper rotating structure supporting the boom and materials being handled is provided with an electrical ground while working near energized transmitter towers.

13. Rated load capacities, operating speed and instructions are posted and visible to the operator.

14. Cranes are equipped with a load chart.

15. The operator understands and uses the load chart.

16. The operator can determine the angle and length of the crane boom at all times.

17. Crane machinery and other rigging equipment is inspected daily prior to use to make sure that it is in good condition.

18. Accessible areas within the crane's swing radius are barricaded.

19. Tag lines are used to prevent dangerous swing or spin of materials when raised or lowered by a crane or derrick.

20. Illustrations of hand signals to crane and derrick operators are posted on the job site.

21. The signal person uses correct signals for the crane operator to follow.

22. Crane outriggers are extended when required.

23. Crane platforms and walkways have antiskid surfaces.

24. Broken, worn or damaged wire rope is removed from service.

25. Guardrails, hand holds and steps are provided for safe and easy access to and from all areas of the crane.

26. Load testing reports/certifications are available.

27. Tower crane mast bolts are properly torqued to the manufacturer's specifications.

28. Overload limits are tested and correctly set.

29. The maximum acceptable load and the last test results are posted on the crane.

30. Initial and annual inspections of all hoisting and rigging equipment are performed and reports are maintained.

31. Only properly trained and qualified operators are allowed to work with hoisting and rigging equipment.

**C. HAZARDS AND SOLUTIONS**

**Forklifts**

**Hazard:**

Approximately 100 employees are fatally injured and approximately 95,000 employees are

injured every year while operating powered industrial trucks. Forklift turnover accounts for a significant

number of these fatalities.

**Solutions:**

1. Train and certify all operators to ensure that they operate forklifts safely.

2. Do not allow any employee under 18 years old to operate a forklift.

3. Properly maintain haulage equipment, including tires.

4. Do not modify or make attachments that affect the capacity and safe operation of the forklift without written approval from the forklift's manufacturer.

5. Examine forklift truck for defects before using.

6. Follow safe operating procedures for picking up, moving, putting down and stacking loads.

7. Drive safely--never exceed 5 mph and slow down in congested or slippery surface areas.

8. Prohibit stunt driving and horseplay.

9. Do not handle loads that are heavier than the capacity of the industrial truck.

10. Remove unsafe or defective forklift trucks from service.

11. Operators shall always wear seatbelts.

12. Avoid traveling with elevated loads.

13. Assure that rollover protective structure is in place.

14. Make certain that the reverse signal alarm is operational and audible above the surrounding noise

15. Forklift truck operators are competent to operate these vehicles safely as demonstrated by their successful completion of training and evaluation.

16. No employee under 18 years old is allowed to operate a forklift.

17. Forklifts are inspected daily for proper condition of brakes, horns, steering, forks and tires.

18. Powered industrial trucks (forklifts) meet the design and construction requirements established in American National Standards Institute (ANSI) for Powered Industrial Trucks, Part II ANSI B56.1-1969.

19. Written approval from the truck manufacturer is obtained for any modification or additions which affect capacity and safe operation of the vehicle.

20. Capacity, operation and maintenance instruction plates, tags or decals are changed to indicate any modifications or additions to the vehicle.

21. Battery charging is conducted in areas specifically designated for that purpose.

22. Material handling equipment is provided for handling batteries, including conveyors, overhead hoists or equivalent devices.

23. Reinstalled batteries are properly positioned and secured in the truck.

24. Smoking is prohibited in battery charging areas.

25. Precautions are taken to prevent open flames, sparks or electric arcs in battery charging areas.

26. Refresher training is provided and an evaluation is conducted whenever a forklift operator has been observed operating the vehicle in an unsafe manner and when an operator is assigned to drive a different type of truck.

27. Load and forks are fully lowered, controls neutralized, power shut off and brakes set when a powered industrial truck is left unattended.

28. There is sufficient headroom for the forklift and operator under overhead installations, lights, pipes, sprinkler systems, etc.

29. Overhead guards are in place to protect the operator against falling objects.

30. Trucks are operated at a safe speed.

31. All loads are kept stable, safely arranged and fit within the rated capacity of the truck.

32. Unsafe and defective trucks are removed from service.

**C. HAZARDS AND SOLUTIONS**

**Personal Protective Equipment**

The following checklists may help you take steps to avoid hazards that cause injuries, illnesses and fatalities. As always, be cautious and seek help if you are concerned about a potential hazard.

**Personal Protective Equipment (PPE)**

**1. Eye and Face Protection**

a. Safety glasses or face shields are worn anytime work operations can cause foreign objects getting into the eye such as during welding, cutting, grinding, nailing (or when working with concrete and/or harmful chemicals or when exposed to flying particles).

b. Eye and face protectors are selected based on anticipated hazards.

c. Safety glasses or face shields are worn when exposed to any electrical hazards including work on energized electrical systems.

**2. Foot Protection**

a. Construction workers should wear work shoes or boots with slip-resistant and puncture resistant soles.

b. Safety-toed footwear is worn to prevent crushed toes when working around heavy equipment or falling objects.

**3. Hand Protection**

a. Gloves should fit snugly.

b. Workers wear the right gloves for the job (for example, heavy-duty rubber gloves for concrete work, welding gloves for welding, insulated gloves and sleeves when exposed to electrical hazards).

**4. Head Protection**

a. Workers shall wear hard hats where there is a potential for objects falling from above, bumps to their heads from fixed objects, or of accidental head contact with electrical hazards.

b. Hard hats are routinely inspected for dents, cracks or deterioration.

c. Hard hats are replaced after a heavy blow or electrical shock.

d. Hard hats are maintained in good condition.

e. Toeboards are installed around the edges of permanent floor openings (where persons may pass below the opening).

f. Floor openings (12 inches or more) are guarded by a secured cover, a guardrail or equivalent on all sides (except at entrances to stairways).

**C. HAZARDS AND SOLUTIONS**

**Confined Space**

**1. GENERAL SAFETY CONCERNS**

a. Be able to recognize a confined space. If you are unsure, do not enter until you find out.

b. Obtain permission before entry. Never enter any confined space without the permission of an individual responsible for field enforcement.

c. Understand hazards before entry Every confined space is different Make sure you know the hazards and are properly protected before entry

d. Lockout upstream utilities. Tags or locks on upstream utilities are necessary to prevent someone from accidentally opening a valve on a line you are working on

e. Insure adequate ventilation. If natural ventilation is not enough, make sure you use mechanical ventilation to avoid bad air.

f. Standby person must be available it something happens in the confined space, you will not be able to help yourself. Have a standby person on top and in contact with you-.

g. Understand the rescue plan. Accidents happen and you must know what to do when the worst happens. By then it is too late to learn.

h. Be aware of changing condition. Air conditions can change rapidly. Pay attention to the signs that can save your life.

**2. CONFINED SPACE DEFINITION**

A typical confined space may have one or more of the following characteristics which may pose serious hazards to personnel required to work within such spaces and may also deter rescue operations.

a. The space has limited or restricted openings for entry or exit, making it difficult for an individual to enter with lifesaving equipment, or to rescue an individual in case of emergency.

b. The space is not designed for continuous worker occupancy.

c. The space may contain known or potentially hazardous atmospheres - oxygen deficiency or oxygen enrichment, presence of flammable/explosive, toxic or otherwise injurious, asphyxiating or incapacitating substances.

d. A space where conditions of engulfment or entrapment, or any other recognized serious safety or health hazard may exist or develop Common confined spaces include silos, tanks, vats, vessels, boilers, compartments, ducts, sewers, pipelines, utility manholes, vaults, bins, tubs, pits, degreasers, tunnels, crawl spaces, incinerators, scrubbers, air exhaust plenums, rooms with improper size openings with or without natural or mechanical ventilation and other similar spaces.

**3. TRAINING EMPLOYEES**

All employees required to enter into confined or enclosed spaces shall be instructed as to the nature of the hazards involved, the necessary precautions to be taken and in the use of protective and emergency equipment required. We shall comply with any specific regulations that apply to work in dangerous areas.

**4. TESTING AIR QUALITY**

a. Thorough and careful testing of the confined space atmosphere must be conducted before any entry can be planned. Monitoring of the atmosphere inside the space must be performed by a qualified person using properly calibrated instruments.

b. The atmosphere of the confined or enclosed space to be entered will be tested for oxygen deficiency and gaseous conditions which are possible in the excavation. The results of the testing will be recorded and meet the guidelines set up by the Michigan Department of Public Health, Division of Occupational Health. In testing the air quality in a confined space the minimally acceptable respiration atmosphere will be as follows: oxygen - 19.5%, combustible gas - 5% of the lower explosive limit (L.E.L.) for each gas; chemicals - the airborne concentration of Occupational Health limits.

c. Consideration of physical or mechanical hazards around the confined space is another element involved in preparing to enter. Precautions must be taken to ensure that liquids, gases or solids (including granular materials and dust) cannot enter the space during activities. All connecting pipes should be blanked off, physically separated, capped, sealed or otherwise secured.

d. This is accomplished by turning off all hazardous energy sources (electrical, pneumatic, hydraulic or mechanical), disconnecting valves, and locking or tagging out (if lockout is feasible) equipment to prevent accidental start-up during confined space activities.

e. Mechanical ventilation and purging are also important considerations in preparing to enter a confined space. If pre-entry monitoring indicates oxygen deficiency, or presence of flammable or toxic materials, the space must not be entered until air is purged with forced mechanical ventilation, or clean-up renders the space free of identifiable hazards, as indicated by continuous air monitoring inside.

**5. VENTILATION**

To assure safe conditions, proper ventilation will be put into effect to allow entry into the confined space or enclosure to allow for safe entry. Ventilation equipment will be used to maintain acceptable respiration atmosphere in the confined space during the time employees are inside.

**6. SAFETY AND EMERGENCY EQUIPMENT**

Safety and emergency equipment will be on site and ready to use at the confined space or enclosure which is occupied by personnel, and will be ready and easily accessible to personnel to rescue.

**C. HAZARDS AND SOLUTIONS**

**Electrical Safety**

1. Work on new and existing energized (hot) electrical circuits is prohibited until all power is shut off and grounds are attached.

2. An effective Lockout/Tagout system is in place.

3. Frayed, damaged or worn electrical cords or cables are promptly replaced.

4. All extension cords have grounding prongs.

5. Protect flexible cords and cables from damage. Sharp corners and projections should be avoided.

6. Use extension cord sets used with portable electric tools and appliances that are the three-wire type and designed for hard or extra-hard service. (Look for some of the following letters imprinted on the casing: S, ST, SO, STO.)

7. All electrical tools and equipment are maintained in safe condition and checked regularly for defects and taken out of service if a defect is found.

8. Do not bypass any protective system or device designed to protect employees from contact with electrical energy.

9. Overhead electrical power lines are located and identified.

10. Ensure that ladders, scaffolds, equipment or materials never come within 10 feet of electrical power lines.

11. All electrical tools must be properly grounded unless they are of the double insulated type.

12. Multiple plug adapters are prohibited.

**C. HAZARDS AND SOLUTIONS**

**Demolition**

1. Before a demolition job is begun, a survey of the structure, any adjacent structures, and the immediate vicinity to determine potential dangers and the precautions which may be taken.

2. All Federal, State, and Local safety regulations shall be adhered to.

3. All electric, gas, steam, sewer, and other service lines shall be shut-off, capped or otherwise controlled outside the building line before demolition work is started.

4. The subcontractor shall ascertain that all lines are cleaned or purged and properly cleared and tagged for safe removal.

5. Subcontractors shall comply with all Federal & State standards regarding asbestos.

6. During demolition, continuing safety inspections shall be made as work progresses to detect hazards, resulting from weakened or deteriorated floors, walls or loosened materials.

7. Where it may apply, special precautions shall be taken to protect the public.

8. All necessary safety precautions shall be taken to protect occupants when renovation work is done in an occupied building.

**C. HAZARDS AND SOLUTIONS**

**Fire Prevention**

1. A high standard of housekeeping shall be maintained on all jobsites.

2. Accumulation of trash (oily rags, combustible material) is prohibited.

3. Smoking is prohibited in hazardous areas.

4. Area around welding operations shall be kept free of flammable or combustible material at all times.

5. There shall always be an unrestricted passage to, and an adequate clear area around, fire hydrants, extinguishers fire hose, control valves, and other emergency equipment to permit quick and easy access.

6. All stairways, walkways and elevator approaches shall be kept clear.

7. Portable heating equipment used during construction shall comply with II safety requirements and shall be in good operating condition.

8. Heating devices used indoors for offices, trailers, lunchrooms, etc., must be specifically equipped and approved for this purpose.

9. If a heating device is fueled by propane or other gas, tanks ho/ding such fuel shall be installed and secured outside the structure.

10. All gas lines and connections between the heating device and its fuel tank(s) shall be regularly checked for leaks.

11. Reserve fuel supplies shall be kept to a minimum and shall be safely stored and secured.

12. Empty tanks shall be promptly removed from the site.

13. Solid fuel salamanders are prohibited for any use whatsoever.

14. Flammable liquids (such as gasoline, oil, paint and solvents) shall be clearly identified and stored separately away from work areas.

15. Appropriate warning signs, such as flammable and no smoking, shall be provided in storage areas.

16. All portable containers used for transporting or dispensing gasoline or other flammable liquids shall be properly identified.

**D. HOW MISS DIG WORKS**

1. MISS DIG is a utility communication system that helps contractors comply with State Law (Public Act 53) which requires them to notify utilities before they excavate, tunnel or discharge explosives three (3) working days before starting a project.

2. MISS DIG can assist the contractor in fulfilling the responsibilities under Public Act 53 by calling the MISS DIG number, 1-800-482-7171.

3. The call will be received by a trained operator at our Call Center in Pontiac, Michigan, who will ask for the following information:

a. Phone Number

b. Name of Caller

c. Name of Contractor

d. County

e. Township or City or Village

f. Town, Range and Section Numbers

g. Type of Work

4. Location of Work - Street address, lot number, subdivision, exact location where digging will be done (front, back or sides), cross streets.

5. Starting Date of Work

6. Overhead Question - Will you be able to maintain a minimum of 10 ft. clearance from overhead electric lines with the equipment you will be using on the job?’

7. If the caller is requesting information about overhead electric lines, the MISS DIG operator will arrange a meeting between the caller and the electric company representative to discuss the overhead lines in the area. State and federal standards have established protective measurements to assure adequate clearance between wires and equipment.

8. When the operator has taken all the information needed to complete the staking request, the caller will then be provided with a MISS DIG ticket number which should be kept for future reference.

9. All calls are voice tape recorded. The information received is entered into a computer, which documents the time and date of the call and then transmitted over telephone lines to MISS DIG participating utilities.

10. The MISS DIG toll-free number is staffed from 6 am to 7 pm, Monday through Friday, except national holidays. However, if there is a need for immediate emergency response by utilities to locate underground facilities because of gas leaks, water main breaks, cable cuts, etc., the MISS DIG toll-free number can be called any time, day or night. For this purpose, MISS DIG operates 24 hours a day.

11. PARTICIPATING PRIVATE, PUBLIC AND MUNICIPAL UTILITIES WITH UNDERGROUND CABLES OR PIPES IN THE AREA WILL SEND REPRESENTATIVES TO LOCATE AND STAKE ITS FACILITIES WITH COLOR-CODED STAKES, MARKERS AND/OR PAINT USING THE COLOR-CODE REQUIRED BY STATE LAW AS FOLLOWS:

Electric power distribution and transmission - Safety red

Municipal electric systems - Safety red

Gas distribution & trans. - High visibility safety yellow

Oil distribution & trans. - High visibility safety yellow

Dangerous materials, product lines - High visibility safety yellow

Telephone & telegraph systems - Safety alert orange

Police & fire communications - Safety alert orange

Cable television - Safety brown

Water systems - Safety precaution blue

Sewer systems - Safety green

Storm drains - Safety green

12. Documentation of all staking requests received and transmitted are kept in a separate file for future reference for four years. Should a caller need to refer to a recent MISS DIG order (e.g. to change information given on the order) they need only to dial the MISS DIG toll-free number and give the operator the MISS DIG ticket number. THE OPERATOR CANNOT CHECK THE ORDER WITHOUT THE MISS DIG TICKET NUMBER.

13. For a nominal fee, MISS DIG provides a research service of orders that have been place within the last four years. For more information regarding MISS DIG, please call our administration office at the number listed below.

MISS DIG Utility Communication System

1030 Featherstone Road

Pontiac, Michigan 48342-1830

(313) 332-3422

**E. BASIC JOBSITE SAFETY RULES**

1. Wearing of proper protective clothing and/or equipment is mandatory (hard hats, approved eye protection) No shorts, cutoffs, or sneakers are allowed.

2. Proper storage and protection of materials and supplies stored on the jobsite. All material damaged on the jobsite due to improper storage and protection is strictly the responsibility of the trade involved.

3. All power tools used on the job are to be three (3) wire type and properly grounded. Temporary exposed wiring connections will not be permitted.

4. The location of the subcontractor’s first-aid equipment must be clearly marked.

5. Emergency telephone numbers must be conspicuously posted (ambulance, police, rescue squad, fire department, etc.).

6. Positively no high velocity power actuated tools to be used on the job. Low velocity tools may be used by a trained operator whose name has been registered with United Consulting Services, LLC.

7. Anyone, regardless of position or trade, who threatens or actually takes part in any physical action endangering the safety or well-being of others will be discharged or removed from the job site immediately.

8. No hoisting of materials through open shafts will be permitted at any time without the expressed permission of the Company. This will be contingent upon proper planking above and below hoisting area and proper guardrails and toeboards at intermediate floors between hoisting area.

9. No open fires are permitted in the building and/or the jobsite at any time.

10. The subcontractor will be required to meet or exceed all safety requirements established by current federal, state, city and local authorities including but not limited to MIOSHA and any other governing authority or agency.

11. When working with hazardous or toxic material, all subcontractors’ workmen must use the proper approved equipment and protection.

12. Acetylene and oxygen bottles are to be stored and used in an upright position and securely lashed together to a fixed structure.

13. The subcontractor shall comply with all applicable federal, state, city and local safety and sanitary laws, regulation and ordinances, as well as the established safety rules and practices of the Company

14. The subcontractor shall, at his own expense properly protect the owner’s and adjoining property from injury and shall make good any damage to same without delay.

15. The subcontractor shall provide and properly maintain warning signs and lights, barricades, railings and other safeguards for the protection of workmen and others on, about, or adjacent to the work, as required by the conditions and progress of the work and as directed by the Company

16. The Construction Manager will conduct monthly safety meetings. It is a requirement that the job Superintendent attend these meetings. The subcontractor’s superintendents will be required to attend these meetings also.

17. The subcontractor will schedule and hold weekly Tool-B ox’ Safety Meetings for all their employees.

**F. HAZARD COMMUNICATION PROGRAM**

**1. POLICY STATEMENT**

The Company in its daily activities uses numerous and varied materials. Some of these materials are classified as hazardous. The Michigan Right to Know Law is designed to provide information to employees who may be exposed in the course of their employment to these hazardous materials.

The major components of the Right to Know Law are:

Identifying Hazardous Chemicals

Labeling of Hazardous Chemicals

Maintaining Material Safety Data Sheets (MSDS) provided by the Supplier of the Chemical

Training of Employees in their Rights and Obligations under the Right to Know Law

The Law became effective February 25, 1987. The Michigan Departments of Public Health and labor jointly possess authority to administer and enforce the provisions of the Law. The Company has adopted this Hazard Communication Program to make its employees aware of the procedure for identifying, labeling, and obtaining information about hazardous substances in the workplace.

**2. IDENTIFYING HAZARDOUS CHEMICALS**

The Company does not have the ability to ascertain by analysis the hazardous quality of chemicals that may be purchased for use in its construction activities. For hazardous substance identification, it will rely on the Material Safety Data Sheets (MSDS) provided by the material supplier, and on hazardous warning labels found on containers.

**3. LABELING**

The Receiving Supervisor and/or Superintendent will be responsible for seeing that all containers of hazardous substances received by the Company are properly labeled. The labels shall be checked for the identity of the substance, nature of the hazard, warning, and name and address of the responsible party.

The Receiving Supervisor and/or Superintendent will request warning labels from the supplier for all shipments arriving without labels. A file of such letters shall be maintained. Each jobsite Superintendent shall be responsible for seeing that portable containers of hazardous chemicals used in his work area are labeled with an identity and hazard warning. Hose and piping systems shall be color coded at access points.

**4. MATERIAL SAFE7Y DATA SHEETS (MSDS)**

Copies of MSDS’S for all hazardous chemicals to which employees may be exposed will be kept in a binder in the Superintendent’s Office.

Copies of MSDS’S from subcontractors will be filed under each subcontractor’s name at the job site office and at United Consulting Services, LLC Main Office.

MSDS ‘S will be available for review to all employees during each work shift.

The Estimator, Project Manager or Superintendent shall make request for MSDS’s on all contracts. A file of follow-up letters shall be maintained for all shipments received without MSDS’s

The Purchasing Supervisor shall provide Superintendents with the required MIOSHA Right to Know poster and postings, notifying employees of new or revised MSDS ‘s within (5) days of receipt of a new or revised MSDS.

Post Form #2 105 (Poster on where MSDS’s are located) and Form #2 106 (New or Revised MSDS) at the jobsite.

**5. HAZARDOUS NON-ROUTINE TASKS**

Periodically, our employees are required to work in confined spaces. Prior to starting work in such a place, each employee will be given information by his foreman about hazards involved when working in confined spaces. This information will include:

a. Specific chemical hazards;

b. Protective/safety measures the employees must take; and,

c. Measures the company has taken to lessen the hazards, such as ventilation, respirators, the presence of another employee and emergency procedures.

It is company policy that no employee will begin work on any hazardous non-routine task, including work in a confined space, without first receiving a safety briefing.

**6. EMPLOYEE INFORMATION AND TRAINING**

The Superintendent and the Main Office shall coordinate and maintain records of training conducted by the Company

Before starting work, each new employee will attend a safety meeting and be given a copy of the Company Written Hazard Communication Program. Training will cover the following:

- Chemical & their hazards which may be found in construction

- How to lessen or prevent exposure to these hazardous chemicals

- What the company has done to lessen or prevent worker’s exposure to these chemicals

- Procedures to follow if they are exposed to these chemicals

- How to read and interpret labels and MSDS’S used

After attending the meeting each employee will sign a form stating that they received the written materials outlined above and received the safety training.

Before any new hazardous chemical is introduced into the job, each employee will be given information in the same manner as during the safety meeting. The Superintendent will be responsible for seeing that MSDS’S on the new chemical are available.

**7. INFORMING CONTRACTORS**

It/s the responsibility of the superintendents to inform subcontractors of their responsibilities on the Michigan Right to Know Law, and to inform them of the following information:

Hazardous chemicals to which they may be exposed while on the job site

**8. LIST OF HAZARDOUS CHEMICALS**

The following is a partial list of Hazardous Chemicals used on most construction jobs. Further information on each hazardous chemical noted can be obtained by reviewing Material Safety Data Sheets in the lob site office.

(Partial) List of Hazardous Chemicals

Concrete Release Agent (React 5)

Concrete Release Agent (Form Free)

Propane

Acetylene

Oxygen

Barium Lithol, Mineral Oil

Quaker State HD Motor Oil

Motor Oil, All SAE Grades

WD-40 Bulk

Kendall Hyken Golden

Hydraulic Oil

Kendall Super-D Ill

Kendall SR- 12X Open Gear Compound

Full Foroe Antifreeze

Quaker State Engine Starting Fluid

Lubriplate Gear Shield Extra Heavy

Kendall Super Blu-Grease L-427

Methanol

Souter Premium H-300

Kendall Three Star

Kendall Dexron II

Unocal 76 Unleaded Gasoline

Unocal 76 Leaded Regular

Unocal Diesel #2

Spirit Multi-Purpose Lithium

Methyl Alcohol

Go-Jo Hand Cleaner

Montmorillonite Clay

Asphalt Plastic

Silicone Rubber Sealant

Ultramarine Pigment

Markal Paintstik

Spray Paint

Tin Solder

Silver Solder

Chromium Steel (welding rods)

Lead Based Paint

Galvanized Steel

Metal Cleaner (De greaser)

Acetylene Gas

Carbon Monoxide

NOTE: This is the procedure for filing your MSDS’S by category from the specifications. The Company Library on MSDS’s will be filed as indicated below:

Division 1 - General Requirements

Division 2 - Site Work

Division 3 - Concrete

Division 4 - Masonry

Division 5 - Metals

Division 6 - Wood & Plastics

Division 7 - Thermal & Moisture Protection

Division 8 - Doors & Windows

Division 9 - Finishes

Division 10 – Specialties

Division 11 – Equipment

Division 12 – Furnishings

Division 13 – Special Construction

Division 14 – Conveying Systems

Division 15 - Mechanical

Division 16 – Electrical

**HAZARD COMMUNICATION PROGRAM**

\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_has received training and a copy of the

Company Name

Hazard Communication Program on The Michigan Right to Know Law on \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Date

The training class was instructed by \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Name

I thoroughly understand my rights under the Michigan Right to Know Law and also understand I am to be trained once, regardless of any job site transfers while employed with the Company

\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Signature

\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Position

**HAZARD COMMUNICATION PROGRAM**

TO: CHEMICAL MANUFACTURER, IMPORTER, OR DISTRIBUTOR

As you are aware, MIOSHA requires employers to provide training to their employees concerning the hazards of chemicals or other hazardous materials.

To properly train our employees, we need a Material Safety Data Sheet (MSDS) for one of your products,

\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_.

Your prompt attention is necessary to maintain a proper level of safety for our employees. Please send

the MSDS for \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ no later than

Sincerely,

**G. RECORD KEEPING**

ALL CONTRACTORS/SUBCONTRACTORS/SUPPLIERS WILL:

1. Meet the requirements of the MIOSHA/OSHA Recordkeeping Requirements.

2. Maintain the standard Daily Log & Summary of Occupational Injury & Illness - Form #200.

3. Maintain the Standard Employers Basic Report of Injury or the MIOSHA Form 101 Supplementary Record of Occupational Injuries & Illness.

4. Classify work-related injuries or illnesses according to the instruction on the reverse side of the Daily Log.

5. Maintain the MIOSHA Poster - Job Safety & Health Protection

**H. Incident/Accident Report Writing**

Incident/accident investigation reports must be well written, as they are the basis for implementing corrective action and preventing similar events from happening again.

**1) MIOSHA Recordkeeping Requirements**

a) Injuries/illnesses must be recorded if they result in any of the following:

i) Death

ii) One or more lost workdays

iii) Restriction of motion or work

iv) Loss of consciousness

v) Transfer to another job

vi) Medical treatment beyond first aid

b) Specific reporting requirements relating to a mishap:

i) Obtain a report on every injury requiring medical treatment

ii) Record each injury on the organization’s accident report form

iii) Prepare a supplemental occupational injuries and illnesses record on the MIOSHA Form BWC-100, or on the workers compensation report

iv) Prepare an annual MIOSHA Form 200 (keeping the names of the injured private) and post this form for the entire month of February

v) Maintain the records in the organization’s file for five years

**2) How to Collect and Write the Report**

a) Facts

i) Present the facts in a logical sequence

ii) Also include information that appears factual but cannot be proven

iii) Eliminate the unsupported hypotheses

b) Analysis

i) Weigh all the facts, conditions, circumstances, and inferences to develop a conclusion

ii) Information is not added in this section of the report

c) Conclusion

i) Only information that can be supported by the analysis step is included in this section of the report

ii) The conclusion is written based on the available information — what is known and what is not known

d) Recommendations

i) This section is the reason for the entire investigation process

ii) Specific recommendations are the basis for specific corrective actions, which prevent additional incidents

iii) Do not combine recommendations — specific recommendations permit individual assignments for corrective actions

e) Records

i) Maintain a file on each incident

ii) Keep all records, purchase orders, and work orders associated with each recommendation in the file

iii) A file is closed out only when all of the corrective actions have occurred

iv) Keep the number of copies of the incident report restricted — three at most — circulate the report on need-to-know basis, not to curiosity seekers

**3) Report Writing Hints**

a) Write the summary after the rest of the report is completed

b) Back up the summary with facts in the body of the report

c) Use drawings

d) Avoid using jargon unless it is needed to understand what happened

e) Record the information as you receive it — do not let it pile up

**I. Project - Emergency Medical and Contact List**

Hospital for Medical Emergencies

Clinic for Non-Emergency Injuries

Insurance Company Contact Information

Emergency Phone Contacts (contractor)

Emergency Phone Contacts (owner)

Emergency Phone Contacts (subcontractors)