HOFFMAN BROS. INC.
EXCAVATING CONTRACTORS

SAFETY PROGRAM

Safety Officer:

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HOFFMAN BROS INC.

SAFETY STANDARDS

It is the policy of this company to keep its employees informed of all safety rules contained in the Construction Safety Standards and the Occupational Health Standards.

Any employee may obtain a copy of any of the above referenced standards by contacting the company Safety Officer.

Hoffman Bros Inc.

ACCIDENT PREVENTION PROGRAM/GENERAL SAFETY RULES

1. It is the policy of **Hoffman Bros Inc** to furnish each employee employment, which is free from recognized hazards that are causing or are likely to cause death or serious physical harm to such employee.

2. **Hoffman Bros Inc.** designates **Brian Hoffman, President** as corporate Safety Officer. This person is responsible for the implementation of the Company's safety program and on-site inspection. If any employee needs to know who the company Safety Officer is, they can find out by asking any foreman.

3. When practical, employees of **Hoffman Bros Inc.** will participate in safety seminars sponsored by Hoffman Bros Inc., MITA, and/or other organizations.

4. The Safety Officer shall designate a qualified employee on each crew or project who will have the following responsibilities:

   a. Instruct each employee regarding operating procedure hazards and safeguards of tools and equipment when necessary to perform the job and as conditions change.

   b. Inspect the construction site, tools and equipment to assure unsafe conditions that may create a hazard are eliminated.

   c. Instruct each employee in the recognition and avoidance of hazards.

   d. 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.

   e. 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.

   f. Instruct each employee required to enter a confined space regarding the hazards involved, the necessary precautions to be taken, the use of personal protective equipment, and the procedures to be followed if an emergency occurs.

   g. Instruct all employees in the steps to be taken in case of an injury or accident.

5. **Hoffman Bros Inc.** shall not knowingly permit an employee 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. Additionally, no employee shall possess/use intoxicating beverages or controlling substances at any Hoffman Bros Inc. facility. Any employee violating this policy is subject to immediate dismissal.

6. The job foreman will inspect all machines, tools and equipment on a regular basis to make certain that no defect is present that will affect the safety of employees.

7. All employee complaints or concerns regarding safety shall be immediately brought to the attention of the Safety Officer.

8. Periodic meetings will be held to inform all employees of the company safety program. Attendance will be documented.

9. This safety program shall be made available to all employees.

10. A copy of the AUC *Trench Safety Handbook* shall be made available to all employees who are involved in working in open excavations.

12 A safety bulletin board will be located at the main office along with one at each job trailer. The board will include required safety postings. An EEO Manual is available for your review in the main office.

11. Employees will adhere to the following Safety Rules:

A. **MISCELLANEOUS RULES**

a. Do not use tools or equipment that you have not been trained or authorized to use. This rule also applies to power-actuated tools.

b. Gasoline must be stored and transported in approved cans only. Engines must be shut off when refueling and no smoking anywhere near flammable liquids.

c. Immediately report all injuries, whether to yourself or a co-worker, to your foreman.

d. Do not distract the attention of fellow workers.

B. **TRENCHING RULES**

a. Spoil must be at least 2 feet back from the lip of the trench.

b. All employees working in excavations or trenches must always stay within the protective system (trench shield, shoring, sloping).

c. Never climb on shoring, trench shields, or sloped walls or ride on any lift, hook, chain, cable, sling, or other equipment parts.

d. Ladders in a trench must extend at least 3 feet above the top of the trench. All employees working in a trench must be within 25 feet of a ladder or ramp.

e. For further excavation information, refer to the AUC *Trench Safety Handbook.*

f. All trenches over 5' deep must be cut to the angle of repose, sheeted or shored.

g. Water from all sources must be control by sumping, stoning, dewatering or other a**c**ceptable methods.

C. **CONFINED SPACE RULES**

a. Do not enter an area classified as a confined space unless you are properly trained and authorized by the company's qualified person. If you don't understand the definition of a confined space, ask your foreman.

b. Atmospheric tests shall be made before any employee enters a confined space or goes underground and the results recorded. If a dangerous atmosphere is encountered, the space shall be ventilated and air quality must be acceptable before entry is allowed. Any positive reading of toxic or explosive gas and any excessive or low levels of oxygen shall be reported to your foreman. No employee shall enter the confined space under these conditions until such time that the readings are at an acceptable level. For more complete rules, see the Confined Space section of this program.

D. **PERSONAL PROTECTIVE EQUIPMENT RULES**

a. All employees outside of a cabbed vehicle or covered piece of equipment must wear a hard hat. Never use metal hard hats.

b. Wear proper eye protection (goggles, safety glasses, etc.) when necessary.

c. Hearing protection shall be used where loud noise is present.

d. Always wear safety vest, hard hats, and boots when directing traffic.

e. Proper clothing will be worn, including hard toe work boots when required, shirts and pants.

E. **HEAVY EQUIPMENT RULES**

a. Every employee, not just the equipment operator, must be fully aware of all safety aspects of heavy construction equipment.

b. Be constantly alert when working around heavy equipment. The operator cannot always see other personnel around his equipment. Stay out from under suspended loads, away from moving equipment, and counterweights.

c. Only designated individuals shall be permitted to operate or service heavy equipment.

d. Perform frequent and periodic inspection as required.

e. The equipment operator must wear the seat belt when required.

f. No employee is permitted to ride on any part of the equipment.

g. It is the responsibility of all employees to make certain that back-up alarms on obstructed rear view heavy equipment be in operable condition. Use a flagger to move equipment when back up alarms are inoperable.

h. Maintain a 10' minimum clearance from energized lines; use a spotter in difficult areas.

F. **FALL PROTECTION**

a. All manholes which present a fall hazard should be covered and identified as a hole.

b. Guardrails around open shafts and bore pits deeper than 6' should be 42" plus or minus 3" high.

c. The intermediate rail should be positioned halfway between the floor and top rail.

d. The threshold for fall protection use is 6'. Fall protection may be accomplished by guarding, personal fall arrest systems or safety nets. Ask your qualified person.

G. **TRAFFIC**

a. All traffic control devices are to be placed under the direction of the Qualified Employee. While flagging or directing vehicular traffic, a reflectorized, fluorescent orange warning vest, and hard hat shall be worn at all times. Flag people are to be courteous at all times.

b. A six foot staff two-sided paddle sign with "STOP" on one side and "SLOW" on the other shall be used to control traffic.

c. Traffic control devices shall be installed and maintained as prescribed by Part 6 of the Michigan Manual of Uniform Traffic Control Devices.

d. When working in or adjacent to vehicular traffic always face the flow of traffic or use of a spotter.

e. Replace traffic control devices that have been damaged or downed signs as soon as possible.

f. Cover construction traffic control when work is not in progress if possible.

g. Consult the qualified person with traffic regulation questions.

H. **TUNNEL RULES**

a. Always use the in and out board.

b. Always wear the proper PPE depending on job assignment.

c. Never stand under suspended loads being lowered into shaft.

d. Prior to tunneling be sure the proper rescue equipment is in place and the tunnel rescue team is assembled.

e. Inspect haulage equipment regularly.

f. Always have a top-man when employees are working in the tunnel.

g. Tunnels longer than 225’ must be equipped with a means of communication at the following points:

a) The working face	d) Hoisting station if provided
b) The top of the shaft	e) Each 1,000’ of tunnel
c) the bottom of the shaft	f) The office if provided

h. Test the atmosphere of the tunnel as often as necessary to assure air quality of at least 19.5% and no more than 22% oxygen, record results.

I. AUGER OPERATIONS

a. Remain a safe distance from rotating augers.

b. Remove excess dirt when augers come to a complete stop.

c. Never work on auger equipment unless controls have been locked out, or keys removed to prevent accidental operation

d. Cover open holes until dewatering system is installed.

J. CRANE OPERATIONS

a. Always complete a daily visual inspection of a crane before operation.

b. A current annual written inspection should be maintained at each jobsite where a crane is used.

c. A rated capacity chart should be in the cab of each crane.

d. Always barricade the swing radius of a crane.

e. Operators should never leave a load unattended.

f. Maintain 10' minimum clearance from energized lines; use a spotter in difficult areas.

g. Discard nylon slings with any wear cord exposure.

h. Only use tagged chains of appropriate size for items being lifted.

i. When using hand signals, remain in a position in which the operator can clearly see all hand signals.

j. Wire ropes must be taken out of service if 6 random wires are broken in one lay, or 3 broken wires in one strand in 1 lay exists.

k. Wire ropes must be taken out of service if severely worn or distorted.

K. FALL PROTECTION & GUARDING

a. Perimeter cables constructed of 3/8" cable with danger signs midway between the cable supports may be used as a fall protection device.

b. Perimeter cables should be 42" above floor with a maximum of 6" deflection.

c. When guarding work areas, adhere to the following:

1. Never use resteel (rebar) for guardrail construction.
2. Guardrail support posts should be spaced not more than 8' apart.
3. Guardrail height should be 42" plus or minus 3".
4. The intermediate rail should be halfway between the floor and top rail.
5. Open-sided floors and work platforms 6' high or greater should be guarded unless a safety belt or harness is used.

L. SIGNALS, SIGNS AND BARRICADES

a. The Michigan Manual of Traffic Control Devices (MMUTCD) is utilized for some traffic layouts on other projects. MDOT has developed plans for placement of these devices, please consult your qualified person regarding proper placement of traffic control devices.

b. A handheld stop/slow paddle with 6’ staff is required when controlling traffic.

c. Barricades may be used to direct vehicular traffic whenever work is being done on a public right-of-way. Ask your foreman.

d. When working in or adjacent to vehicular traffic *always* face the flow of traffic or use a spotter.

M. SCAFFOLDING

a. Scaffolding should only be erected and inspected daily under the direction of a qualified employee. All persons must be trained in the use of scaffolding.

b. Keep scaffolding free from excess tools, materials and debris.

c. All scaffolding 6' or higher must have a guardrail system installed on any open side.

d. Tag and remove from service any wood or laminated planks in poor condition, along with any bent scaffolding members.

e. Maintain a 6' clearance from energized lines.

f. A fall arrest device must be worn when working on a scaffold at or above 10'.

N. **PORTABLE LADDERS**

a. Only use type 1A or type 1 ladders for construction purposes. Inspect for damages and tag out damaged ladders.

b. Always extend ladders 3' above the landing surface to which the ladder is used to gain access and no steeper than 4 to 1 ratio.

c. Never use a step ladder as a straight ladder by leaning it against a wall or support.

d. All ladders used in conjunction with platforms must be secured at top and bottom.

O. **WELDING AND CUTTING**

a. Always wear the appropriate personal protective equipment when welding or cutting, i.e., aprons, leggings, safety shoes, hard hats and proper goggles, shield or safety glasses for the operations being performed. Obtain hot work permit if required.

b. Store full and empty cylinders valve-end up and secured with chain or bracket. Be sure to place caps in cylinders not in use.

c. Always use backflow devices on gas and oxygen hoses.

d. Never weld or cut in a confined space without taking the proper precautions.

e. Only use welding and cutting equipment if you have been trained and authorized to do so.

f. Clean all drums, barrels and tanks of toxic or flammable, combustible material before performing welding or cutting operations.

P. **AERIAL WORK PLATFORMS**

a. Aerial work platforms should only be operated by employees who have been trained and issued a permit to use this equipment.

b. The permit issued may only be used when performing work for the employer who issued the permit.

c. All occupants of aerial work platforms must use a harness with lanyard attached to the appropriate points of the platform.

d. Never belt off to an adjacent structure when working from an aerial platform.

e. Never stand on rails or planks to achieve additional working height.

f. Always maintain a minimum 10' clearance from energized electrical lines.

Q. SAFETY NETS

a. Safety nets, when used, should be installed in the following manner:

Vertical distance from working level to horizontal plane of net.	Minimum required horizontal distance of outer edge of net from the edge of the working surface.
up to 5 feet	8 feet
more than 5 feet up to 10 feet	10 feet
more than 10 feet	13 feet

b. Clear all tools and scrap materials which have fallen into safety nets as soon as possible.

c. All safety nets should have a drop test performed on them after installation and every 6 months thereafter. Drop testing is done by dropping 400 lbs. bag of sand into the net, unless net can be certified without the drop test.

R. PERSONAL FALL ARREST SYSTEMS

a. Personal fall arrest systems must be worn when workers are exposed to falls 6' or greater.

b. The attachment point of harness shall be located in the center of the wearer's back, near the shoulder level.

c. Never use body harnesses as material handling devices.

d. Do not re-use fall protection devices that have been subjected to impact loading until they have been inspected and considered suitable for use by a qualified employee. Tag this equipment out of service until such an inspection can be performed.

e. Visually inspect all harnesses before use.

f. Do not attach fall protection devices to guardrail systems.

S. PILEDRIVING SAFETY

a. All hose connections to piledriver hammers, pile extractors, or jet pipes shall be securely attached, with an adequate length of cable to prevent whipping if the joint is broken.

b. Hanging or swinging leads of piledrivers shall have fixed ladders. Fixed leads shall be provided with rings or attachment points so that the aloft worker may engage his/her safety belt lanyard to the leads.

c. Landings or leads shall not be used for storage of any kind.

d. Piledriver leads shall have stop blocks to prevent the hammer from being raised against the head block.

e. Pilehammers shall be lowered to the bottom of the leads while the piledriver is being moved.

f. Hoisting of steel piling shall be done by use of a closed shackle or other positive attachment that will prevent accidental disengagement.

g. If piling cannot be pulled without exceeding the load rating of equipment, a pile extractor shall be used.

h. Piling shall not be pulled by tipping the crance, releasing the load brake momentarily, and catching the load before the crane has settled.

i. A blocking device shall be provided for placement in the leads under the hammer at all times while employees are working under the hammer.

j. Guards shall be provided across the top of the head block to prevent the cable from jumping out of the sheaves.

k. Steam or air line controls shall consist of two shutoff valves, one of which shall be a quick-acting lever type within easy reach of the hammer operator.

l. All employees shall be kept clear when piling is being hoisted into the leads.

m. When driving jacked piles, all access pits shall be provided with ladders and bulkheaded curbs to prevent material from falling into the pit.

T. **PIPE BORING & JACKING OPERATIONS**

a. Construct pit in accordance to design unless otherwise directed by the qualified person on site.

b. Barricade pit properly this may be done with one or a combination of the following:

1. Snow fencing at least 6' back from edge of pit.
2. Railing at least 42" high with mid-rail.
3. Steel plates driven in a manner that provides 42" of fall protection.

c. The area in front of the excavator will remain unbarricaded during work hours for equipment reach and operator visibility reasons. No employees are permitted between the excavator and open side of the pit. During non-working hours this area requires barricading.

d. Entry into any casing requires the following:

1. Test and record air monitoring results prior to entry. Continuous monitoring during occupation.
2. Never enter a small diameter casing without anklets and a lifeline in place.
3. The use of a rolling cart is recommended in small diameter casings.
4. Never enter a casing without an attendant present.

5. Have ventilation equipment available and use if necessary.

6. Five minute air packs must be available on site prior to entering any casing.

e. Ingress and egress should be accomplished by use of an approved ladder free from defects. All ladders must be secured from accidental displacement and extend 36" above the landing area.

U. **RESPIRATORY PROTECTION**

(Mandatory) Information for employees using respirators when not required under the standard.

Respirators are an effective method of protection against designated hazards when properly selected and worn. Respirator use is encouraged, even when exposures are below the exposure limit, to provide an additional level of comfort and protection for workers. However, if a respirator is used improperly or not kept clean, the respirator itself can become a hazard to the worker. Sometimes, workers may wear respirators to avoid exposures to hazards, even if the amount of hazard substance does not exceed the limits set by OSHA standards. If your employer provides respirators for your voluntary use, or if you provide your own respirator, you need to take certain precautions to be sure that the respirator itself does not present a hazard.

You should do the following:

1. Read and heed all instructions provided by the manufacturer on use, maintenance, cleaning and care, and warnings regarding the respirators limitations.
2. Choose respirators certified for use to protect against the contaminant of concern. NIOSH, the National Institute for Occupational Safety and Health of the U. S. Department of Health and Human Services, certification should appear on the respirator packaging. It will tell you what the respirator is designed for and how much it will protect you.
3. Do not wear your respirator into atmospheres containing contaminants for which your respirator is not designed to protect you against. For example, a respirator designed to filter dust particles will not protect you against gasses, vapors, or very small solid particles of fumes or smoke.
4. Keep track of your respirator so that you do not mistakenly use someone else's respirator.

Dust masks will be made available at no cost to employees for voluntary use. You may wish to consider the use of these masks during work operations that create dust environments.

V. UTILITY LOCATING—BEST PRACITCES

Prior to Excavating

The MISS DIG System must be contacted 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.

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 of 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**.

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 Dig Notice, has cause to be concerned about the presence of an unmarked facility(s) **because:**

(i) there is visible evidence of a facility(s),

(ii) a notified Underground Facility Owner failed to provide a positive response, or

(iii) there exists a positive response indicating a location was marked, but the marks are missing,

then the excavator shall give notice to the potential unmarked Underground Facility Owners(s) by contacting MISS DIG. Upon notification of this situation to MISS DIG, the Underground Facility Owner shall respond within three (3) hours; unless a later time period for response is agreed upon by the excavator and the Underground Facility Owner.

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 time. **Requests for additional assistance must be made through MISS DIG: 800-482-7171.**

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.

Safe Zone

Your intended area of excavation has been divided into two areas with regard to excavating. The first area is as follows:

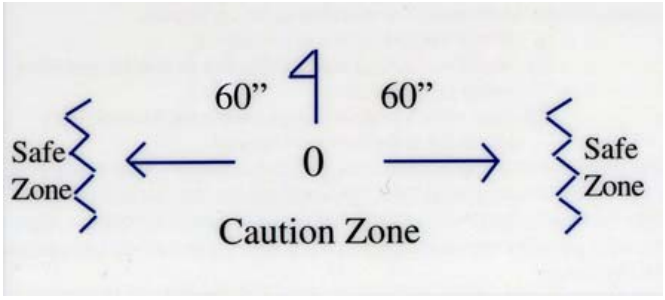
Safe zone - Relates to the area at least **60" or farther away** from either side of the mark(s) provided by the utility owner. No hand digging or facility verification is required when excavating in the safe zone. Be sure to remain diligent regarding evidence of unmarked facilities.

Caution Zone

Your intended area of excavation has been divided into two areas with regard to excavating. The first area was discussed above. The second area is as follows:

- **Caution Zone** - Means the area **within 60" of either side** 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 at intervals as often as reasonably necessary to establish the precise location of the underground facility. You may commence excavation with powered equipment once you have established the location of the facility.

Diagram of Safe Zone and Caution Zone



Marks

Paint, stakes, and/or flags may be utilized to mark underground facilities. Often times, 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 - indicates either natural gas, oil, steam, petroleum, or other gases
Orange - indicates phone and cable
Red - indicates electric
Blue - indicates water
Green - indicates storm drains
Brown - indicates sewer

W. CONCRETE OPERATIONS

1. Always wear rubber over boots when working with concrete, These boots will be provided.

2. Avoid contact with eyes and skin. If contact occurs, flush area with clean water. If irritation continues, consult MSDS binder for additional information

3. When finishing concrete, wear kneepads for protection.

4. Be aware of concrete shutes and pump hose. These swinging apparatuses present a hazard when moving.

5. Watch for Traffic when doing road pours. Always try to face traffic and be aware of float poles that may extend outside of closed lanes.

X. DEMOLITION OPERATIONS

1. Prior to demolition a survey will be conducted to determine: building condition, weather adjacent structures will be affected by demolition, check for any other conditions that may threaten employee safety. A copy of the written report should be kept in the field office.
2. Be sure all utilities have been shut off.
3. Manual demolition should be performed under the direction of the qualified person.
4. Do not torch-cut painted steel unless it has been determined that it does not contain lead.
5. Asbestos should be removed by an associate contractor prior to demolition. If you suspect or find asbestos material cease work and bring it to the attention of your foreman.

6. Do not use mechanical equipment on a floor or other working surface unless it is capable of supporting the equipment and its intended load.
7. Use curbs or stop logs to prevent mechanical equipment from tracking over an edge or drop.
8. Only the employees necessary to the operation of mechanical demolition shall be permitted in the demo area.
9. When possible or feasible use water to control dust created during the demolition process.

HOFFMAN BROS INC.

CONFINED SPACE PROGRAM

1. **CONFINED SPACE DEFINITION**

   A. Confined space or enclosed space means any space having a limited means of entry and exit, which may be subject to the accumulation of toxic of flammable contaminants or may have an oxygen deficient atmosphere. Confined or enclosed spaces include, but are not limited to, storage tanks, underground utility vaults, tunnels, pipelines, manholes, gatewells, catch basins and open top spaces more than 4 feet in depth such as pits, tubs, vaults, and vessels.

2. **TRAINING EMPLOYEES**

   A. 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. The company shall comply with any specific regulations that apply to work in confined spaces.

3. **TESTING AIR QUALITY**

   A. The atmosphere of the confined or enclosed space to be entered will be tested for oxygen deficiency and gaseous condition which are possible in the confined or enclosed space. 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 respirable 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 each chemical present must be compared with the Michigan Occupational health limits -- Maximum Allowable Concentration.

   B. The testing of a confined space will be done by a positive type reading instrument to give the levels at the time before entry and this will be recorded before entry into the space. The testing will be done by a qualified person who has been trained how to operate the instrument, calibrate the instrument, and the testing procedures. Additional testing may be requested by the employee.

4. **VENTILATION**

   A. When necessary to assure air quality, proper ventilation will be put into effect to allow entry into the confined space or enclosure, to allow for safe entry. If natural ventilation is not adequate, ventilation equipment will be used to maintain respirable atmosphere in the confined space during the time employees are inside.

5. **SAFETY AND EMERGENCY EQUIPMENT**

A. Air monitoring devices will be on site and will be calibrated by trained personnel, these devices will be able to monitor oxygen deficient atmosphere, toxic, or combustible gases.

B. In the event that local emergency units are not readily available, 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 for rescue. Examples of rescue equipment are rescue rope or lifelines, safety harnesses, first aid kits, and any other equipment that would be needed to provide for safe rescue.

6. **GENERAL SAFETY CONCERNS**

A. If ventilating a confined or enclosed space opening interferes with vehicular traffic, appropriate warning signs and protective barriers shall be promptly set up before the covers of manholes, hand holes, or vaults are removed. The wording of a warning sign would depend upon the nature and the location of the hazards involved. Before an employee enters a street opening such as a manhole, it shall be protected with a barrier, temporary cover, or other suitable guard.

B. If circumstances dictate that the company employees perform rescue procedures, means shall be provided for quick removal of employees in case of emergency. When a safety harness and lifeline are used, they should be properly attached to the employee so that his/her body cannot be jammed in the exit opening.

C. A standby employee with a pre-plan rescue procedure shall be stationed outside the entrance to the confined or enclosed space to observe or communicate with the employee(s) at all times. The standby employee shall be trained and equipped to initiate rescue operation. It should be realized that a single person can seldom raise an unconscious body without a mechanical device. This rule is interpreted to mean that without such a device, additional personnel must be within easy summoning distance. It is also interpreted to require approved self-contained breathing apparatus or escape type air-line respirators for the additional personnel who may have to enter the confined or enclosed space to perform a rescue.

D. The above written procedures are the guidelines to be used by **Hoffman Bros Inc.** employees in a confined or enclosed space, and all other rules that are not covered in this above procedure shall be governed by the Michigan Department of Public Health, Division of Occupational Health confined or enclosed space entry procedures. These guidelines will be review and updated yearly.

HOFFMAN BROS INC.

LEAD ABATEMENT OPERATIONS

GENERAL

NIOSH and the Occupational Safety and Health Administration (OSHA) have recently recommended that exposure to lead dust and fumes be minimized by the use of engineering controls and work practices, and by the use of personal protective equipment (PPE) including respirators.

Workers are potentially exposed to lead during work on bridges or other steel structures such as water and fuel storage tanks. Workers who may be exposed to lead include abrasive blasters, inspectors, iron workers, painters and laborers.

1. HEALTH EFFECTS

Lead can be absorbed into the body by inhalation (breathing) and ingestion (eating). Lead is a cumulative poison. It accumulates in the blood, bones and organs. Cumulative exposure to lead, which is typical in construction settings, may result in damage to the blood, nervous system, kidneys, bones, heart and reproductive system and contributes to high blood pressure.

A. The symptoms of lead poisoning include the following:

a. Headache
b. Poor appetite
c. Dizziness
d. Irritability/anxiety
e. Constipation
f. Pallor
g. Excessive tiredness
h. Numbness
i. Metallic taste in mouth
j. Muscle & joint pain or soreness
k. Sleeplessness
l. Hyperactivity
m. Weakness
n. Reproductive difficulties
o. Nausea
p. Fine Tremors
q. Insomnia
r. “Lead line” on gums
s. “Wrist drop” weakness of extensor muscles

2. EMPLOYEE SAFETY PRACTICES FOR LEAD PROTECTION

A. Personal Hygiene Practices

a. All workers exposed to lead should wash their hands and faces before eating, drinking or smoking, and they should not eat, drink, or use tobacco products in the work area.

b. Contaminated work clothes should be removed before eating.

c. Workers should change into work clothes at the worksite. Street clothes should be stored separately from work clothes in a clean area. Workers should change back into their street clothes after washing or showering before leaving the worksite to prevent the accumulation of lead dust in the workers' cars and homes and thereby protect family members from exposure to lead.

d. Personal vehicles taken to the worksite should be parked where they will not be contaminated with lead.

B. Personal Protective Equipment (PPE)

a. Protective clothing should be worn in order to minimize the accumulation of lead on the worker's skin and hair. Workers should change into work clothes immediately before entering the work area, and change out of these clothes before leaving the jobsite.

b. Employees are provided with a half mask respirator as protection against airborne lead concentrations. Sandblasters are provided with a supplied air sandblast hood. All respirators use NEPA filters or equal.

3. **ENGINEERING CONTROLS FOR LEAD PROTECTION**

A. Warning signs are to be used to mark the boundaries of lead-contaminated work areas.

B. Blood tests for lead level will be required on an annual basis of all employees at risk of being exposed to lead.

a. Blood lead levels of 1 to 49 are within the acceptable range.
b. Blood lead levels of 40 or above require a medical examination of worker and consultation.

c. Blood lead levels of 50 or above call for removal of worker from any job with potential lead exposure.

C. Air monitoring will be performed at the worksite to determine:

a. Composition of the paint.

b. Measure worker exposure to airborne lead and other hazardous agents e.g., silica and solvents.

c. Select the engineering controls and PPE required.

D. When performing abrasive blasting, scaling, chipping, grinding or other operations to remove lead-based coatings, all available work practices will be utilized in order to decrease air-borne lead dust and fumes (e.g. negative air, wet plastering, daily clean-up of lead-containing and abrasives).

E. Workers will be trained/notified on the following topics as they relate to lead exposure:

a. Information about the potential adverse health effects of lead exposure.

b. Information about the early recognition of lead intoxication.

c. Instruction about heeding signs that mark the boundaries of lead-contaminated work areas.

d. Discussion of the importance of personal hygiene practices.

e. Instruction about the use and care of appropriate protective equipment.

4. **SAFE WORK PRACTICES**

A. Use the exhaust ventilation system, where provided.

B. Use the correct, clean respirator.

C. Keep the worksite clean. Use only a vacuum with a HEPA filter or wet cleaning methods when removing lead dust. Never use compressed air for cleaning.

D. Eat, drink, or smoke in areas outside the worksite. Keep all lunch boxes and coffee cups away from the work area. Use a separate lunchroom.

E. Wash hands and face before eating, drinking, smoking or applying cosmetics.

F. Use protective clothing. Store street clothes separately from work clothes. Never wear contaminated clothes home.

5. **TRAINING**

Construction standards, require that a potentially exposed employee be informed of the hazards of lead and be trained in the precautions to take when working around it. The employee shall also be instructed in proper work practices, personal equipment, such as eye and face protection, head protection, coveralls and respirators.

HOFFMAN BROS INC.

HAZWOPER PROGRAM

A. **HAZMAT INFORMATION**

The following employees of **Hoffman Bros Inc.** have been trained and are certified in HAZMAT procedures.

Hazardous materials for job will be stored at:

PPE Specifications for HAZMAT

Task	Level	Body	Head	Respirator
General work uniform when no chemical exposure is anticipated	D	Work clothes; steel-toe, steel-shank leather work boots; work gloves	Hardhat , Safety glasses, Ear protection	None required
All tasks with potential for chemical exposure	Modified D	**COVERALLS**: UncoatedTyvek® **BOOTS**: Steel-toe, Steel-shank chemical resistant boots or Steel-toe, steel-shank leather work boots with outer rubber boot covers. **Gloves**: Inner surgical-style nitrile glove and outer chemical-resistant nitrile glove.	Hardhat, splash shield, Safety glasses, Ear protection.	None required

Not Authorized	C	**COVERALLS**: UncoatedTyvek® **BOOTS**: Steel-toe, Steel-shank chemical resistant boots or Steel-toe, steel-shank leather work boots with outer rubber boot covers. **Gloves**: Inner surgical-style nitrile glove and outer chemical-resistant nitrile glove.	Hardhat, splash shield, Ear protection, Spectacle insrets	APR, full-face, MSA Ultratein or equivalent; with GME-H cartridges or equivalent.
Not Authorized	B	**COVERALLS**: UncoatedTyvek® **BOOTS**: Steel-toe, Steel-shank chemical resistant boots or Steel-toe, steel-shank leather work boots with outer rubber boot covers. **Gloves**: Inner surgical-style nitrile glove and outer chemical-resistant nitrile glove.	Hardhat, splash shield, Ear protection, Spectacle insrets	Positive pressure demand self-contained breathing apparatus (SCBA): MSA ultralite or equivalent.

REASONS FOR UPGRADING OR DOWNGRADING LEVEL OF PROTECTION

UPGRADE	**DOWNGRADE**
• Request from individual performing task.	• New information indicating that situation is less hazardous than originally thought.
• Change in work task that will increase contact or potential contact with hazardous materials.	• Change in site conditions that decreases the hazard.
• Occurrence or likely occurrence of gas or vapor emission.	• Change in work task that will reduce contact with hazardous materials.
• Known or suspected presence of dermal hazards.	
• Instrument action levels (section 6) exceeded.	

Decontamination Specifications

Personnel	**Sample Equipment**	**Heavy Equipment**
Boot wash/rinse Glove wash/rinse Outer-glove removal Body-suit removal Inner-glove removal Respirator removal Hand wash/rinse Face wash/rinse Shower ASAP PPE disposal method, Bag and dispose on-site. Water disposal method: none anticipated.	Wash/rinse equipment Solvent-rinse equipment Solvent disposal method:	Power wash Steam clean Water disposal method:

Diagram of Personnel Decontamination Line

No eating, drinking, or smoking is permitted in contaminated areas and in exclusion or decontamination zones. The SSC should establish areas for eating, drinking, and smoking. Contact lenses are not permitted in exclusion or decontamination zones.

The following diagram illustrates a typical establishment of work zones, including the decontamination line. Work zones are to be modified by the SSC to accommodate task-specific requirements.

ADDITIONAL DOCUMENTS

MIOSHA Publication 85-115 Standard Operating Safety Guides, US EPA and the Occupational Safety

and Health Guidance manual for Hazardous Waste Site Activities, are available to view with the

Superintendent at the **Hoffman Bros Inc.** office located at: _____

I. HAZMAT EMERGENCY RESPONSE

1. As part of its safety program it is the policy of **Hoffman Bros Inc.** to make certain that all employees have been instructed as to proper procedures in case of an injury or accident.

2 **Hoffman Bros Inc.** designates the 911 system as its first response in the event of a medical emergency and/or rescue operation.

3. A list of emergency phone numbers will be posted at the jobsite when practical. If no suitable or convenient location exists, the list will be kept by the project foreman.

4. All injuries and/or accidents shall be reported to the job foreman immediately.

5. All accidents and/or injuries shall be reported to the Safety Officer as soon as is practical.

6 **Hoffman Bros Inc.** will provide a person at each job site who is trained in American Red Cross CPR and First Aid procedures as required by any applicable Safety & Health Standards.

7. Never move an injured person unless absolutely necessary. Further injury may result. Keep the injured comfortable and utilize available first aid equipment until an ambulance arrives.

EMERGENCY EQUIPMENT AND SUPPLIES

Emergency equipment & supplies	Location
First Aid Kit (weather proof container)	In field vehicle
Eye wash	In field vehicle
Portable water	In field vehicle
Additional equipment (specify) portable phone	In field vehicle
NOTE: All supplies updated yearly	

INCIDENT RESPONSE

In fires, explosions, or chemical releases, actions to be taken include the following:

- Shut down site operations and evacuate work area.
- Account for personnel at the designated area(s).
- Notify appropriate response personnel.
- Assess the need for site evacuation, and evacuate the site as warranted.

EVACUATION SIGNALS

SIGNAL	MEANING
Grasping throat with hand	Emergency-help me
Thumbs up	OK, Understood
Grasping buddy's wrist	Leave area now
Continuous sounding of horn	Emergency, leave site now.

EMERGENCY RESPONSE PHONE NUMBERS

Site Address:

Police: **911***
Fire: **911***
Ambulance: **911***
Water: **MISS DIG 1-800-482-7171**
Gas: **MISS DIG 1-800-482-7171**
Electric **MISS DIG 1-800-482-7171**

*When using a cellular phone outside the telephone's normal calling area, exercise caution in relying on the cellular phone to activate 911. When the caller is outside the normal calling area, the cellular service carrier should contact the caller with emergency services in the area where the call originated, but this may not occur. Telephone numbers of backup emergency services should be provided if a cellular phone is relied on to activated 911.

HOFFMAN BROS INC.
EMERGENCY RESPONSE PROGRAM

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Hoffman Bros Inc.
HAZARD COMMUNICATION PROGRAM

"RIGHT TO KNOW PROGRAM"

GENERAL

The following hazard communication program has been established for **Hoffman Bros Inc.** and will be available for review by all employees.

1. **HAZARD DETERMINATION**

The Safety Officer will be relying on material safety data sheets from suppliers to meet determination requirements.

2. **LABELING**

A. The Safety Officer will be responsible for seeing that all containers coming in are properly labeled.
B. All labels shall be checked for:
   a. Identity
   b. Hazard
   c. Name & address of responsible party
C. Each foreman shall be responsible for seeing that all portable containers used in their work are labeled with identity & hazard warning.

3. **MATERIAL SAFETY DATA SHEETS (M.S.D.S.)**

A. The Safety Officer will be responsible for compiling the master M.S.D.S. file. It will be kept at: _____

B. Copies of M.S.D.S. for all hazardous chemicals to which employees may be exposed will be made available to all employees upon request.

C. Each foreman will be provided with M.S.D.S. file and the required MIOSHA Right-To-Know posters & postings notifying employees of new or revised M.S.D.S. within five (5) days of receipt of new or revised M.S.D.S.

4. **EMPLOYEE INFORMATION AND TRAINING**

A. The Safety Officer shall coordinate & maintain records of training conducted for **Hoffman Bros Inc.**

B. Before starting work, or as soon as possible thereafter, each new employee will attend a safety briefing. In that class, each employee will be given information on:

a. Chemicals & their hazards in the workplace.
b. How to lessen or prevent exposure to these chemicals.
c. What the company has done to lessen or prevent workers exposure to these chemicals.
d. Procedures to follow if they are exposed.
e. How to read & interpret labels & M.S.D.S.
f. Where to locate M.S.D.S. and from whom they may obtain copies.

C. The employee will be informed that:

a. The employer is 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 training sessions. The records will be kept by the Safety Officer.

E. Before any new hazardous chemical is introduced into the workplace, each employee will be given information in the same manner as during the safety briefing.

5. **HAZARDOUS NON-ROUTINE TASKS**

A. On occasion, employees may be required to do work in potentially hazardous areas (e.g. confined spaces). Prior to starting work in such areas, each employee will be given information about the hazards involved in these areas. This information will include:

a. Specific chemical hazards.
b. Protection/safety measures the employee can take to lessen risks.
c. Measures the company has taken to lessen the hazards including ventilation, respirators, the presence of another employee, and emergency procedures.

B. It is the policy of **Hoffman Bros Inc.** that no employee will begin work in a confined space, or any non-routine task, without first receiving a safety briefing.

6. **INFORMING CONTRACTORS**

A. It is the responsibility of the Safety Officer to provide any subcontractors with employees on the job site exposed to our chemicals with the following information:
   a. Hazardous chemicals with which they may come in contact.
   b. Measures the employees may take to lessen the risks.
   c. Where to get M.S.D.S. for all hazardous chemicals.
   d. MSDS book is located _____

B. It is the responsibility of the Safety Officer to obtain chemical information from contractors when they will expose our employees to hazardous chemicals which they may bring into our workplace.

7. **LISTS OF HAZARDOUS CHEMICALS**

The list of the chemicals used by **Hoffman Bros Inc.** can be obtained by reviewing M.S.D.S.

HOFFMAN BROS INC.

EQUIPMENT GROUNDING CONDUCTOR PROGRAM

This program is designed to inform employees of the inspection and testing of all electrical cords, plugs and tools to prevent injuries from occurring. The foreman in conjunction with the shop is responsible for implementing this program.

A. All extension cords, plugs, electrical tools and equipment shall be visually inspected before each days use for external defects or damage and for possible internal damage. Damaged or defective cords, plugs, electrical tools or equipment shall not be used or sent to the shop for repair.

B. For the generators equipped with ground fault interrupters, please adhere to the following:
    a. Check all ground fault interrupters every time the generator is started.
    b. If the reset button pops out, the ground fault interrupter is good.
    c. If the reset button does not pop out, the ground fault interrupter is bad.
    d. A bad ground fault interrupter will cause shocking to occur.
    e. Call the shop to repair or replace a bad ground fault interrupter.
    f. Do not wire the throttle. It will cause the ground fault interrupter to go bad.
    g. The frame of all welders must be grounded.

C. The following tests shall be performed:

    a. All equipment grounding conductors shall be tested for electrical continuity.
    b. Each receptacle or plug shall be tested for correct attachment of the equipment grounding conductor. The equipment grounding conductor shall be connected to its proper terminal.

D. All required tests shall be performed:

    a. Before first use.
    b. Before equipment is returned to service following any repairs.
    c. Before equipment is used after any incident which can be reasonably suspected to have caused damage.

d. At intervals not exceeding 3 months, except that extension cords and receptacles which are fixed and not exposed to damage shall be tested at intervals not exceeding 6 months

Tests performed as required by MIOSHA shall be recorded. The records shall identify each extension cord or electrical equipment that passed the test and shall indicate the last date it was tested or the interval it was tested. This record shall be maintained until replaced by a more current record. The record shall be made available at the jobsite for inspection by a MIOSHA director or representative, and any affected employee.

HOFFMAN BROS INC.

RESPONSIBILITIES OF FOREMAN / QUALIFIED EMPLOYEE

A "Qualified Person" means 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 relating to the subject matter and work.

1. Assure that the safety program is implemented.

2. Inspect the job site to assure that no unsafe conditions exist.

3. Make sure that necessary protective equipment is on hand and used when required.

4. Instruct all employees in safe procedures and job safety requirements. Follow up and insist on compliance.

5. Discuss safety with employees on every operation. Have periodic safety meetings.

6. See that all injuries are cared for properly and reported promptly.

7. Investigate all accidents. File a complete accident report with the Safety Officer and correct the causes immediately. USE OSHA FORM 300, 300A, 301.

8. Be familiar with the rules pertaining to safety.

9. Report any hazardous conditions to the Safety Officer even if the condition has been corrected.

10. Recommend reprimands for employees found in non-compliance of safety program and related materials. Meet with employees after safety violation to discuss the rules violated and the corrective action required to prevent the violation from repeating.

11. Make sure all employees respect the confidentially of trade secret information when the process safety information is released to them.

FOREMAN/QUALIFIED EMPLOYEE

Safety Checklist

Superintendent:
Job Location:
Date:
Inspected By:

	Yes	No
1. Emergency phone numbers posted.	⑧	⑧
2. First Aid/CPR certified employee on each job site.	⑧	⑧
A. First-aid kits available.	⑧	⑧
B. CPR mask.	⑧	⑧
C. Rubber gloves.	⑧	⑧
D. Haz Mat disposal bag.	⑧	⑧
3. Drinking water with cups available.	⑧	⑧
4. Toilet facilities provided or available.	⑧	⑧
5. Personal safety equipment in use.		
A. Hard hats.	⑧	⑧
B. Eye protection.	⑧	⑧
C. Ear protection.	⑧	⑧
D. Hand protection.	⑧	⑧
E. Foot Protection.	⑧	⑧
F. Clothing protection.	⑧	⑧

	Yes	No
6. Fuel Storage.		
A. Fuel storage area marked “NO SMOKING” Appropriate extinguisher available in area.	⑧	⑧
B. All fuel cans safety type-transport only.	⑧	⑧
7. Traffic and pedestrian control devices properly used.	⑧	⑧
A. Construction signs.	⑧	⑧
B. Proper barricades.	⑧	⑧
C. Traffic cones.	⑧	⑧
D. Flagpersons with six foot staff with red flags and orange vest.	⑧	⑧
E. Flagpersons properly instructed.	⑧	⑧
F. Flagpersons used to assist trucks and vehicles in and out of traffic.	⑧	⑧
8. Tools.		
A. Air tool connections secured with safety chains.	⑧	⑧
B. Portable electric tools provided with approved systems of double insulation and GFCI.	⑧	⑧
C. Extension cords are three wire type and in good condition.	⑧	⑧
D. Portable lights equipped with bulb guards.	⑧	⑧
E. Protective guards on portable saws in good order.	⑧	⑧
F. Ladder in good condition.	⑧	⑧
G. All hand tools in good condition, no cracked or splintered handles.	⑧	⑧

9. Trucks and equipment.

A. Parking brakes set when not in use.	⑧	⑧
B. Type ABC fire extinguishers available in trucks.	⑧	⑧
C. All horns and lights in good working order.	⑧	⑧
D. Seats firmly secured on vehicles used to transport employees.	⑧	⑧
E. A copy of the most recent equipment inspection checklist on site.	⑧	⑧
F. Roll over protection and seat belts in good order.	⑧	⑧
G. Equipment safety chains in good order and in use.	⑧	⑧
H. Registration cards in all trucks.	⑧	⑧
I. Equipment and vehicle properly lubricated and maintained.	⑧	⑧
J. All drivers with valid licenses.	⑧	⑧
K. Back-up alarms in good working order.	⑧	⑧
L. Windshield void of cracks/wipers and defoggers in operable condition.	⑧	⑧

10. Excavation, trenching, shoring, pipe laying.

A. Qualified person makes periodic inspections of soil conditions and shoring systems.	⑧	⑧
B. Effort made to locate underground installations by inspection and notification to MISS DIG 1-800-482-7171.	⑧	⑧
C. Excavated material stored 2 feet from edge of excavation.	⑧	⑧
D. Materials used for shoring in good working condition - trench box inspected for broken welds.	⑧	⑧
E. Walls on manhole and ditch excavations more than 5 feet deep shored or sloped or otherwise protected.	⑧	⑧
F. Means of ingress/egress provided every 25 feet in trenches over 4 feet deep.	⑧	⑧
G. Warning signs posted on truck cranes and excavating equipment. Maintain minimum 10 foot clearance when working near electrical lines.	⑧	⑧

11. Working in confined spaces.

A. Confined space tested for gas before entry.	⑧	⑧
B. Confined space ventilated with blowers before entry.	⑧	⑧

C. Smoking or open flame not permitted within 25 feet of confined space.	Ⓢ	Ⓢ
D. Upstream utilities tagged and locked out.	Ⓢ	Ⓢ
E. Obtain Entry Permits if required	Ⓢ	Ⓢ
12. Handling and storage of materials		
A. Rigging equipment inspected at beginning of each shift.	Ⓢ	Ⓢ
B. Chains are alloy steel with permanent tag showing size, grade, rated capacity and manufacturer's name.	Ⓢ	Ⓢ
C. Material staked, raked, blocked, interlocked or otherwise secured to prevent sliding, falling or collapse during storage or transit.	Ⓢ	Ⓢ
D. Inspect hooks for stretching or twisting.	Ⓢ	Ⓢ
E. Slings in good condition and built properly.	Ⓢ	Ⓢ
13. MIOSHA safety poster displayed.	Ⓢ	Ⓢ
14. Accident report filled out promptly and completed after each accident. Phoned in to office for typing and mailing.	Ⓢ	Ⓢ
15. Safety manual on jobsite.	Ⓢ	Ⓢ
16. New employees given brief orientation as to company policies.	Ⓢ	Ⓢ
17. Conduct one 10 minute safety meeting (Tool Box Talk) with crew each week. Records of topic and attendance must be turned into home office.	Ⓢ	Ⓢ
18. MSDS booklet and poster.	Ⓢ	Ⓢ

REMARKS

HOFFMAN BROS INC.

PERSONAL PROTECTIVE EQUIPMENT POLICY

It is the policy of **Hoffman Bros Inc.** that all employees comply with the Michigan Occupational Safety and Health Act standards in regards to the use of personal protective equipment. Violation of this policy will be subject to discipline as outlined in this section.

1. This company shall provide all personal protective equipment (PPE) as required in Part 6 of the MIOSHA standards.

2. All employees shall be properly trained when PPE is necessary, adjust and wear PPE and limitations of PPE. Some PPE must be fitted to each affected employee. If employee demonstrates lack of use, insufficient skill or understanding they shall contact the qualified employee for additional training. Record of training of personal protective equipment will be kept on file at the company office.

3. All employees outside of a cabbed vehicle or a covered piece of equipment must wear a hard hat. There will be no exceptions to this rule.

4. All employees must wear required hand protection, gloves, etc., when an employee is exposed to hazards such as radiation, alkalies, acids, adhesives and temperature extremes other than those caused by weather conditions. Appropriate hand protection other than ordinary work gloves will be supplied by the company.

5. Any employee directing vehicular traffic must wear a fluorescent orange vest.

6. All employees must wear long pants and a shirt with sleeves (no tanks).

7. All employees must wear proper foot protection if conditions on the job are likely to cause foot injury. Tennis shoes or similar footwear is strictly forbidden.

8. The use of face and eye protection will vary according to the task performed. All employees must consult with the qualified employee to determine the proper method of protection and this protective gear must be worn.

9. Personal protective equipment shall be maintained and used in sanitary and reliable condition. Any PPE that is found to be defective shall be immediately taken out of service and reported to the safety officer or qualified person.

10. Acknowledgment of receipt of personal protective equipment will be kept on file at the company office. Personal owned PPE will not be allowed.

11. A company disciplinary policy is in effect regarding personal protective equipment and is available to all employees upon request.

Acknowledgment and Receipt
Personal Protective Equipment

_____, an employee of **Hoffman Bros Inc** received a copy of the company's policy (Dated _____) regarding the wearing of personal protective equipment and am aware of the disciplinary procedure I can be subject to for failure to wear personal protective equipment as instructed.

I acknowledge receipt of and instruction in the wearing of the following personal protective equipment:

1.

2.

3.

4.

5.

6.

I further acknowledge that I may turn in equipment which has been damaged or no longer functions properly because of use or normal wear and tear and receive a free replacement of that item. However, if I should lose or damage through neglect any company-provided personal protective equipment, I authorize the company to deduct the cost of that item, in the pay period in which the loss or damage is reported or detected, from any wages which the company may owe me.

Date: _____ Employee Signature _____

EMPLOYEE DISCIPLINE REPORT

Job Location

_____

Employee

_____

Describe the job condition or employee action that led to disciplinary action:

_____
_____
_____
_____
_____
_____

Support reprimand: Determine if this was a violation of company policy and if the individual being reprimanded was aware of the policy and received any training in this regard (i.e. safety program, Trench Safety Handbook, Bridge Safety Handbook or conferences).

_____
_____
_____
_____

Action taken to correct situation:

_____
_____
_____
_____

Discipline Taken:

A.	Verbal warning	B.	Written warning
C.	Suspension	D.	Discharged
E.	Other – describe		

_____

_____

_____

Issued by: _____

Date: _____

HOFFMAN BROS INC.

TOOL BOX TALK

REPORTING FORM

Supervisor: _____

Date: _____

SAFETY ISSUE(S)/TOPIC(S) DISCUSSED:

_____

_____

_____

_____

_____

EMPLOYEES IN ATTENDANCE:

_____

_____

_____

_____

_____

_____

_____

_____

HOFFMAN BROS INC.

Fire Extinguishers

1. The employee shall be trained annually in the proper use and general principles and the hazards involved in the initial stage fire fighting.

2. The employee shall visually inspect the fire extinguisher monthly for proper charge, broken seal or damage. Damaged or discharged fire extinguishers shall be immediately replaced.

3. Fire extinguisher shall be subject to annual inspection and maintenance check by certified fire extinguisher Service Company.

HOFFMAN BROS INC.

HAND/POWER TOOLS

1. Do not operate hand and power tools unless you are trained for safe and proper use by a qualified person and the tool is maintained for safe operation.

2. Do not operate without proper PPE to protect against exposure to falling, flying, abrasive and splashing objects or exposure to harmful dust, fumes or gases.

3. Do not override guards or operate tool with defective guards, broken parts, frayed power cords or other defects. All defective tools must be immediately taken out of service and be tagged, ”OUT OF SERVICE”.

First Aid Program

Purpose

Hoffman Bros., Inc. is dedicated to the protection of its employees from on-the-job injuries and illnesses. However, when injuries or illnesses do occur, we are prepared to respond to the needs of the injured or ill.

This written First Aid Program is intended to ensure that Hoffman Bros., Inc. meets the requirements of 29 CFR 1910.151, Medical Services and First Aid.

First Aid Personnel

All of our people are trained in First Aid and CPR annually by certified American Red Cross instructors. It is to be understood that such care is basic and follow up attention, including, but not limited to, activation of the local emergency services system is appropriate by dialing 911.

Hazard and Medical Assessment

The competent person will assess Hoffman Bros., Inc. work operations for hazards to determine whether any pose the risk of injury or illness. Provisions for first aid care shall be made prior to each work assignment. As such each worksite shall have a trained care provider, from a recognized agency such as the American Red Cross, available at all times to render immediate, initial care.

Serious injuries or illnesses which require medical attention beyond first aid shall be treated at the nearest hospital, clinic, or infirmary, whichever is closest to the worksite. Life threatening or similar emergencies require the summoning of the local emergency medical services through the 911 system.

First Aid Supplies and Equipment

It is important that our first aid supplies and equipment meet the specific needs of our workplace and on our worksites.

The Safety Manager has ensured that adequate first aid supplies, in accordance with ANSI Z308.1-2009 are current and readily available.

Each worksite will have first aid supplies.

Training

Training is the heart of our First Aid Program. Employees who are qualified to render first aid have completed a training program recognized by Hoffman Bros., Inc. as a nationally accepted program.

Training Certification

After an employee has completed our training program, the trainer will determine whether the employee can safely perform first aid. Brian Hoffman is responsible for keeping records verifying certification of each employee who has successfully completed training. Each certificate (card) is a valid certificate in first-aid training, and includes the name of the employee, the date(s) of the training, and the signature of the person who performed the training and evaluation.

Retraining

Trained employees are retrained in accordance with established agency timelines to keep their knowledge and skills current.

Incident Reporting

After the immediate needs of an injury or illness emergency have been met, we require our employees to report the event to their supervisor. Extremely minor injuries, like a small bruise, do not need to be reported. However, those injuries and illnesses involving professional treatment, time away from work, or a near miss of a more serious accident, must be reported to an employee's supervisor. Even injuries that do not become apparent until after the cause must be reported. For example, back pain that develops over a period of time must be reported.

Recordkeeping

The Safety Manager is responsible for maintaining the training records and documentation relating to first aid, injuries, illnesses and accidents.

Forklifts

Purpose

To define the procedures and standards that apply to the care, control, maintenance, inspection and operation of forklifts.

Forklifts shall be operated, maintained and controlled in a safe manner.

This policy covers minimum performance standards applicable to all Company employees and locations. Local practices requiring more detailed or stringent rules or local, state or other federal requirements regarding this subject can and should be added as an addendum to this procedure as applicable.

Scope

Company employee work sites, i.e., company offices, client job sites, etc. requiring the use of forklifts.

Definitions

Forklift means a mobile, power-propelled truck used to carry, push, pull, lift, stack or tier materials. Forklifts are also commonly known as pallet trucks, rider trucks, fork trucks or lift trucks.

Requirements

Training

Only trained and authorized persons are permitted to operate a forklift. Hoffman Bros. will administer the forklift operator certification program and maintain training records.

Training shall occur prior to employee operation of any forklift, and at least every three years thereafter unless observed performance by the operator dictates the need for more frequent retraining. Each trainee, who satisfactorily completes the qualifications as outlined above, shall be issued a written document as evidence of being a Qualified Forklift Operator.

Inspection and Maintenance

Prior to placing a forklift into service, the operator shall inspect the vehicle.

Any noted condition that affects the safe operation of the lift truck shall be reported to a mechanic for corrective action and shall keep the lift truck from being operated until the unsafe condition is corrected.

Forklifts that are defective, in need of repair or are unsafe shall be tagged and taken out of service until restored to safe operating condition.

General Safe Operating Rules

The following safe operating rules apply to employees who operate a forklift. Violations of safe operating rules can and will result in retraining and/or disciplinary action

1) Only employees trained as per the requirements of this manual section shall be allowed to operate forklifts.
2) Forklifts shall not be loaned or rented to others for use.
3) Stunt driving and horseplay shall not be permitted.
4) Personnel are not permitted to ride on forklifts except in designated seats that are part of the equipment design.
5) Forklifts shall be equipped with a portable fire extinguisher.
6) Under travel conditions, the forklift shall be operated at a speed that will permit it to be brought to a stop in a safe manner.
7) The driver shall be required to look in the direction of, and keep a clear view of the path of travel.
8) Forklifts shall have a functional back-up alarm with a distinctive sound, loud enough to be heard clearly above background noises.
9) Copies of the manufacturer's operating instructions shall be readily available for review by operators and supervisory personnel.
10) Lift trucks, stackers, etc., shall have the rated capacity clearly posted on the vehicle so as to be clearly visible to the operator. These ratings shall not be exceeded.
11) No modifications or additions, which affect the capacity or safe operation of the equipment, shall be made without the manufacturer's written approval. If such modifications or changes are made, the capacity, operation, and maintenance instruction plates, tags or decals shall be changed accordingly. In no case shall the original safety factor of the equipment be reduced.

12) Steering or spinner knobs shall not be attached to the steering wheel unless the steering mechanism is of a type that prevents road reactions from causing the steering hand wheel to spin. The steering knob shall be mounted within the periphery of the wheel.
13) Forklifts shall have the manufacturer's nameplate showing its weight with attachments, lifting capacity, lift height maximum and other pertinent data. Nameplates or markings shall be maintained in a legible condition and remain in place.
14) Grades shall be ascended or descended slowly
15) On grades, the load and load engaging means shall be tilted back if applicable and raised only as far as necessary to clear the road surface.
16) No person shall be allowed to stand or pass under the elevated portion of any forklift, whether loaded or empty.
17) Arms or legs are prohibited from being placed between the uprights of the mast or outside the running lines of the forklift.
18) When a forklift is left unattended, load engaging means shall be fully lowered, controls shall be neutralized, power shall be shut off, and brakes set.
19) Wheels shall be blocked if parked on an incline.
20) Additional counter weighting of forklifts shall not be allowed unless approved by the manufacturer.
21) Employees shall not jump off a forklift.
22) Forklift operators shall yield to pedestrians.
23) Loads carried shall be secured on the forks to prevent upset / overturn.

The company has developed this program to address the hazards associated with heat- and cold- related illness.

PREVENTING HEAT-RELATED ILLNESSES (HEAT STRESS)

Heat Stress

Heat stress takes place when your body's cooling system is overwhelmed. It can happen when heat combines with other factors such as:

- hard physical work;
- fatigue (not enough sleep);
- dehydration (loss of fluids); and
- certain medical conditions.

Heat stress can lead to illness or even death. The company has a duty to take every precaution reasonable in the circumstances to protect their workers.

Heat stress symptoms

Heat rash: itchy red skin.
Heat cramps: painful muscle cramps.
Heat exhaustion: high body temperature; weakness or feeling faint; headache, confusion or irrational behavior; nausea or vomiting.
Heat stroke: no sweating (hot, dry skin), high body temperature, confusion, or convulsions. Get immediate medical help.

Precautions when working in hot, humid conditions

- Increase the frequency and length of rest breaks.
- Provide **cool drinking water** near workers and remind them to drink a cup every 1/2 hour.
- Caution workers about working in direct sunlight.
- Train workers to recognize the signs and symptoms of heat stress. Start a "buddy system" because it's unlikely people will notice their own symptoms.
- Tell workers to wear light summer clothing to allow air to move freely and sweat to evaporate. They should always wear shirts to protect themselves from direct sunlight.

Cold Stress

When you're cold, blood vessels in your skin, arms, and legs constrict, decreasing the blood flow to your extremities. This helps your critical organs stay warm, but your extremities are at risk for frostbite.

Frostbite means that your flesh freezes. Blood vessels are damaged and the reduced blood flow can lead to gangrene.

The first sign of frostbite is skin that looks waxy and feels numb. Once tissues become hard, it's a severe medical emergency.

Wind chill accelerates heat loss—sometimes to a dramatic extent. For example, when the air temperature is –30°C,

- with no wind, there is little danger of skin freezing;
- with 16 km/h wind (a flag will be fully extended), your skin can freeze in about a minute; and
- with 32 km/h wind (capable of blowing snow), your skin can freeze in 30 seconds.

When your core temperature drops, you're at risk for hypothermia. Early signs of hypothermia are shivering, blue lips and fingers, and poor coordination. Soon your breathing and heart rate slow down, and you become disoriented and confused. Hypothermia requires medical help.

Precautions to prevent cold stress

- Wear several layers of clothing rather than one thick layer.
- Wear gloves if the temperature is below 16°C for sedentary work, below 4°C for light
- work, and below –7°C for moderate work.
- Take warm, high-calorie drinks and food.
- If your clothing gets wet at 2°C or less, change into dry clothes immediately to prevent hypothermia.
- If you feel hot, open your jacket but keep your hat and gloves on.
- Give workers warm-up and rest breaks in a heated shelter. Ensure work is not conducted only within allowable exposure limits, as per provincial OHS Regulations.

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"AN EQUAL OPPORTUNITY EMPLOYER"
"SINCE 1947" 70 Years

HOUSEKEEPING

PURPOSE

This requirement provides the definitions and procedures that must be used by all facilities in defining and managing housekeeping and walking-working surfaces within Company sites. Where local regulations are more stringent than this requirement, those regulations supersede this requirement.

SCOPE

This requirement applies to all Company facilities.

DEFINITIONS

Standard railing – A vertical barrier erected along exposed edges of a floor opening, wall opening, ramp, platform, or runway to prevent falls of persons.

Stairs, stairway – A series of steps leading from one level or floor to another, or leading to platforms, pits, boiler rooms, crossovers, or around machinery, tanks, and other equipment that are used more or less continuously or routinely by employees, or only occasionally by specific individuals.

Platform – A working space for persons, elevated above the surrounding floor or ground; such as a balcony or platform for the operation of machinery and equipment.

REQUIREMENTS

The workplace must be kept in a suitable clean and tidy state.

Aisle-ways must be kept free of hoses, cords, stored materials and other trip hazards.

Floors must be even and free of holes or other trip hazards.

Elevated surfaces (platforms, mezzanines, and such) must be provided with guard rails (standard railing).

Staircases must be safe.

Ladders and other equipment should be secured and not left leaning.

Housekeeping inspections must be conducted at each work site at least monthly.

Training must be provided to all employees at all work sites to maintain orderliness and housekeeping.

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Silica Exposure Control Plan

Part 1 - Introduction

Crystalline silica is a common mineral that is found in materials that we see every day in roads, buildings, and sidewalks. It is a common component of sand, stone, rock, concrete, brick, block and mortar.

Health Hazards Associated with Silica Exposure

The health hazards of silica come from breathing in the dust. Exposures to crystalline silica dust occur in common workplace operations involving cutting, sawing, drilling and crushing of concrete.

Silica Exposures at Hoffman Bros., Inc.

Some activities performed on Hoffman Bros., Inc. Projects can result in the creation/release of silica dust, thus exposing our employees. These activities include, but are not limited to:

- Use of Excavator or Bobcat mounted with hammer attachment to break concrete
- Crushing/Recycling
- Jack-hammering
- Saw-cutting
- Drilling and Coring (of concrete)

Part 2 - Purpose

Hoffman Bros., Inc. is committed to providing a safe and healthy workplace to our employees, recognizing the right of workers to work in a safe and healthy work environment and ensuring that Hoffman's activities do not adversely affect the health and safety of others.

Part 3 - Responsibilities

Due to the risk posed by respirable silica, personnel involved in activities that could potentially create silica dust take specific actions to ensure that, as much as practicable, a hazard is not created. In recognition of this, the following (Silica related) responsibilities have been established.

HOFFMAN BROS. INC.
EXCAVATING CONTRACTORS

Silica Exposure Control Plan

Hoffman Bros., Inc. senior management (Project Managers & Safety Manager) is responsible for:

- Implementing a suitable respirable silica exposure monitoring program. The purpose of the program is so that *(over time)* Hoffman has quantifiable silica exposure data available for all regularly occurring, as well as reasonably foreseeable, work activities.
- Ensuring project and/or task specific Exposure Control Plans (ECPs) are developed, communicated, and effectively implemented as appropriate.
- Ensuring that all required employees receive the necessary education and training related to this policy, as well as project/task specific ECPs.
- Maintaining all applicable records *(i.e. exposure sampling, inspections, respirator fit tests, training records, etc.)*.
- The Hoffman Bros., Inc. Corporate Safety Manager will be responsible for conducting a review of this Policy, as well as: (1) project/task specific ECP's, (2) available exposure monitoring data, (3) Industry/Regulatory information, and (4) new/emerging equipment/technologies on a regular *(i.e. annual)* basis.

Hoffman Bros., Inc. Supervisors (i.e. Superintendents/Foreman) are responsible for:

- Obtaining a copy of the project/task specific ECPs *(and/or other similar such information)*, made available at each work site.
- Ensuring that all the tools, equipment, PPE and materials *(including water)* necessary to implement the ECP is available *(and in good working order)* prior to allowing work activities to commence.
- Training all workers *(under the supervisor's direction and control)*.
- Ensuring that workers adhere to the project/task specific ECP, including PPE and personal hygiene *(i.e. including be clean shaven where the respirator seals to the user's face)* requirements.
- Informing senior management of any new or emergent work that has the potential for silica exposure.

Hoffman Bros., Inc. Employees are responsible for:

- Knowing the hazards of silica dust exposure.
- Using the assigned protective equipment in an effective and safe manner.
- Working in accordance with the project/task specific ECP.
- Reporting *(immediately)* to their supervisor, any hazards *(i.e. unsafe conditions, unsafe acts, improperly operating equipment, etc.)*.

HOFFMAN BROS. INC.
EXCAVATING CONTRACTORS

Silica Exposure Control Plan

Part 4 - Exposure Limits

Exposure Limits/Considerations: The OSHA silica regulation (1926.1153 Respirable Crystalline Silica) lists a Permissible Exposure Limit (PEL) for respirable crystalline silica (including quartz) of 50 micrograms per cubic meter of air ($\mu g/m^3$) and an Action Level of 25 $\mu g/m^3$. This is a concentration to which nearly all workers could be exposed for eight hours a day, five days a week, without adverse health effects.

Part 5 - Risk Identification

Risk Identification: Silica is contained in several of the products used (or disturbed) on Hoffman jobsites. The Project Manager shall identify products/process that could result in potential exposure to both Hoffman and other contractor employees.

The health hazards of silica come from breathing in the dust. In addition to identifying the specific activities/areas where personnel could be exposed to silica dust, the "amount" of exposure and "duration" of exposure must also be considered. With consideration to these three factors, activities performed by Hoffman Bros., Inc. (as well as other contractors working near Hoffman work areas) that have the potential to expose employees to respirable silica dust include, but are not limited to:

- Use of Excavator or Bobcat mounted with hammer attachment to break concrete.
- Jack-hammering
- Crushing/Recycling.
- Saw-cutting
- Drilling and Coring *(of concrete)*.

Part 6 - Risk Assessment

Hoffman Bros., Inc. will implement a suitable respirable silica exposure monitoring program. This program will ensure that *(over time)* Hoffman Bros., Inc. has quantifiable silica exposure data available that is representative of all regularly occurring, as well as reasonably foreseeable work activities. Exposure monitoring may be conducted "in-house" or may be obtained through outside consultants/hygienists.

Part 7- Risk Control

Control Methods: When determining measures to reduce or eliminate worker exposure to silica dust, Hoffman Bros., Inc. will generally select a combination of controls, listed in order of preference:

- Elimination and Substitution.
- Engineering.
- Administrative.
- Personnel Protection Equipment (PPE).

HOFFMAN BROS. INC.
EXCAVATING CONTRACTORS

Silica Exposure Control Plan

Substitution and Elimination: Whenever possible, Hoffman will substitute products containing silica with products that do not contain *(or contain a lower percentage of)* crystalline silica. When substitution is not feasible, during the planning process, Hoffman will make efforts to reduce the need and/or duration of activities that produce exposures to respirable silica.

Engineering Controls: Engineering controls are those controls which aim to control or otherwise minimize the release of crystalline silica. Two "common" engineering control options available are Local Exhaust Ventilation (LEV) and Wet Dust Suppression (WDS) systems.

Local Exhaust Ventilation Systems: Some tools/appliances have LEV systems built in or available as an accessory. Such LEVsystems are generally comprised of a shroud assembly, a hose attachment, and a vacuum system. Dust-laden air is collected within the shroud, drawn into the hose attachment, and conveyed to the vacuum, where it is filtered and discharged. "Large scale" LEV systems, such those available on some Vacuum Trucks and Mobile Sweepers are also available.

When/if LEV systems are used, Hoffman Bros., Inc. will employ the following systems and safe work practices:

- Vacuum attachment systems that capture and control dust at its source whenever possible.
- Dust control systems will be maintained in optimal working condition.
- High Efficiency Particulate Air (HEPA) or good quality, multi-stage vacuum units *(approved for use with silica dust)* will be used in accordance with the manufacturer's instructions.
- Whenever possible, concrete grinding will be completed when the concrete is wet *(thus dust release will be significantly reduced)*.

Wet Dust Suppression Systems: There are many tools/appliances available that are equipped with WDS systems *(i.e. hand held/portable power chop saws)*. When WDS Systems are not available, *(as a standard or retrofitted part of a tool/ appliance)*, similar effects can also be achieved by manually wetting the surface *(i.e. with a mister)*.

When WDS systems are used, Hoffman Bros., Inc. will employ the following systems and safe work practices:

- If water is not readily available on the specific project, the project manager/superintendent will arrange to have a water tank delivered to the site for use.
- Pneumatic or fuel *(i.e. gasoline)* powered equipment will generally be used instead of electrically powered equipment if water is the method of dust control, unless the electrical equipment is specifically designed to be used in such circumstances.
- Wet slurry will be cleaned from work surfaces when the work is complete, if/when necessary.
- When sawing concrete, tools that provide water directly to the blade will be used if possible.

Administrative Controls: Administrative controls are those that aim to control or otherwise minimize the release of silica using work procedure and work methods, rather than by affecting the actual physical work. Common examples of administrative controls include, but are not limited to:

- Rescheduling of work as to avoid the activities of others.
- Relocating unprotected workers away from dusty areas.
- Avoid using compressed air to clean and dry sweeping of silica containing material. Wet sweep whenever feasible.

When administrative controls are used, Hoffman Bros., Inc. will employ the following systems and safe work practices:

- As able, work activities will be scheduled to minimize the silica related affect on, and from, others.
- Suitable housekeeping, restricted work area, hygiene practices, training and supervision procedures/ standards will be determined and implemented on Hoffman projects.

Personal Protective Equipment Controls: When engineering and administrative controls are not effective in reducing exposures below the PEL, use of respiratory protective equipment will be required. Typically, a ½ face N95 respirator will provide adequate protection.

OSHA Table 1 Compliance Option: If performing work practices listed in *OSHA Table 1: Specified Exposure Control Methods When Working With Material Containing Crystalline Silica,* representative monitoring does not need to be performed as long as work practices, methodology, and engineering controls are followed for each task listed. Table 1 is provided in Attachment A.

Part 8 - Education and Training

Education and Training: Prior to performing activities, or working on project sites where personnel could be exposed to silica dust, Hoffman will ensure that personnel receive suitable education and training. While not necessarily an exhaustive list, education and training may include:

- The health hazards and risks associated with exposure to silica dust.
- The specific tasks that could result in silica exposure
- General and specific silica exposure reduction methods/strategies *(i.e. as detailed in the general/specific exposure control plans)*.
- The use of specific pieces of equipment and control systems *(i.e. LEV and WDS systems)*.
- The use and care of respiratory (and other) personal protective equipment.
- The general provisions of the OSHA silica standard.
- The employee identified as the competent person for the Silica Exposure Control Plan.

The education and training detailed will be delivered to Hoffman employee's through a variety of forums, including but not necessarily limited to:

- New Employee Orientations.
- Project/Site Orientations.
- Equipment/task specific training.
- Start of shift "Pre Task Planning".
- Tool Box Talks
- Notifications and Bulletins *(those developed in house and those acquired from other reputable sources).*

Part 9 – Competent Person

The Hoffman jobsite supervisor will serve as the silica competent person and be responsible for the implementation of this written control plan.

HOFFMAN BROS. INC.
EXCAVATING CONTRACTORS

Silica Exposure Control Plan

APPENDIX A – OSHA Table 1

(1) For each employee engaged in a task identified on Table 1, the employer shall fully and properly implement the engineering controls, work practices, and respiratory protection specified for the task on Table 1.

Equipment/Task	Engineering and Work Practice Control Metods	Required Respiratory Protection and Minimum Assigned Protection Factor (APF)	
		≤ 4 hours/shift	≥ 4 hours/shift
(i) Stationary masonry saws	Use saw equipped with integrated water delivery system that continuously feeds water to the blade. Operate and maintain tool in accordance with manufacturer's instructions to minimize dust emissions.	None	None
(ii) Handheld power saws (any blade diameter)	Use saw equipped with integrated water delivery system that continuously feeds water to the blade. Operate and maintain tool in accordance with manufacturer's instructions to minimize dust emissions. – When used outdoors. – When used indoors or in an enclosed area.	None APF 10	APF 10 APF 10

Silica Exposure Control Plan

(iii) Handheld power saws for cutting fibercement board (with blade diameter of 8 inches or less)	For tasks performed outdoors only: Use saw equipped with commercially available dust collection system. Operate and maintain tool in accordance with manufacturer's instructions to minimize dust emissions. Dust collector must provide the air flow recommended by the tool manufacturer, or greater, and have a filter with 99% or greater efficiency.	None	None

(iv) Walk-behind saws	Use saw equipped with integrated water delivery system that continuously feeds water to the blade. Operate and maintain tool in accordance with manufacturer's instructions to minimize dust emissions. – When used outdoors. – When used indoors or in an enclosed area.	None APF 10	None APF 10
(v) Drivable saws	For tasks performed outdoors only: Use saw equipped with integrated water delivery system that continuously feeds water to the blade. Operate and maintain tool in accordance with manufacturer's instructions to minimize dust emissions.	None	None

Silica Exposure Control Plan

(vi) Rig-mounted core saws or drills	Use tool equipped with integrated water delivery system that supplies water to cutting surface. Operate and maintain tool in accordance with manufacturer's instructions to minimize dust emissions.	None	None

(vii) Handheld and stand-mounted drills (including impact and rotary hammer drills)	Use drill equipped with commercially available shroud or cowling with dust collection system. Operate and maintain tool in accordance with manufacturer's instructions to minimize dust emissions. Dust collector must provide the air flow recommended by the tool manufacturer, or greater, and have a filter with 99% or greater efficiency and a filter-cleaning mechanism. Use a HEPA-filtered vacuum when cleaning holes.	None	None
(viii) Dowel drilling rigs for concrete	For tasks performed outdoors only: Use shroud around drill bit with a dust collection system. Dust collector must have a filter with 99% or greater efficiency and a filter-cleaning mechanism. Use a HEPA-filtered vacuum when cleaning holes.	APF 10	APF 10

Silica Exposure Control Plan

(ix) Vehicle-mounted drilling rigs for rock and concrete	Use dust collection system with close capture hood or shroud around drill bit with a low-flow water spray to wet the dust at the discharge point from the dust collector. OR Operate from within an enclosed cab and use water for dust suppression on drill bit.	None None	None None

Silica Exposure Control Plan

(x) Jackhammers and handheld powered chipping tools	Use tool with water delivery system that supplies a continuous stream or spray of water at the point of impact.		
	– When used outdoors.	None	APF 10
	– When used indoors or in an enclosed area.	APF 10	APF 10
	OR		
	Use tool equipped with commercially available shroud and dust collection system.		
	Operate and maintain tool in accordance with manufacturer's instructions to minimize dust emissions.		
	Dust collector must provide the air flow recommended by the tool manufacturer, or greater, and have a filter with 99% or greater efficiency and a filter-cleaning mechanism.		
	– When used outdoors.	None	APF 10
	– When used indoors or in an enclosed area.	APF 10	APF 10

Silica Exposure Control Plan

(xi) Handheld grinders for mortar removal (i.e., tuckpointing)	Use grinder equipped with commercially available shroud and dust collection system. Operate and maintain tool in accordance with manufacturer's instructions to minimize dust emissions. Dust collector must provide 25 cubic feet per minute (cfm) or greater of airflow per inch of wheel diameter and have a filter with 99% or greater efficiency and a cyclonic pre-separator or filter-cleaning mechanism.	APF 10	APF 25
(xii) Handheld grinders for uses other than mortar removal	For tasks performed outdoors only: Use grinder equipped with integrated water delivery system that continuously feeds water to the grinding surface. Operate and maintain tool in accordance with manufacturer's instructions to minimize dust emissions. OR Use grinder equipped with commercially available shroud and dust collection system. Operate and maintain tool in accordance with manufacturer's instructions to minimize dust emissions. Dust collector must provide 25 cubic feet per minute (cfm) or greater of airflow per inch of wheel diameter and have a filter with 99% or greater efficiency and a cyclonic pre-separator or filter-cleaning mechanism. – When used outdoors. – When used indoors or in an enclosed area.	None None None	None None APF 10

Silica Exposure Control Plan

(xiii) Walk-behind milling machines and floor grinders	Use machine equipped with integrated water delivery system that continuously feeds water to the cutting surface. Operate and maintain tool in accordance with manufacturer's instructions to minimize dust emissions. OR Use machine equipped with dust collection system recommended by the manufacturer. Operate and maintain tool in accordance with manufacturer's instructions to minimize dust emissions. Dust collector must provide the air flow recommended by the manufacturer, or greater, and have a filter with 99% or greater efficiency and a filter-cleaning mechanism. When used indoors or in an enclosed area, use a HEPA-filtered vacuum to remove loose dust in between passes.	None None	None None

(xiv) Small drivable milling machines (less than half-lane)	Use a machine equipped with supplemental water sprays designed to suppress dust. Water must be combined with a surfactant. Operate and maintain machine to minimize dust emissions.	None	None

Silica Exposure Control Plan

(xv) Large drivable milling machines (half-lane and larger)	For cuts of any depth on asphalt only: Use machine equipped with exhaust ventilation on drum enclosure and supplemental water sprays designed to suppress dust. Operate and maintain machine to minimize dust emissions. For cuts of four inches in depth or less on any substrate: Use machine equipped with exhaust ventilation on drum enclosure and supplemental water sprays designed to suppress dust. Operate and maintain machine to minimize dust emissions. OR Use a machine equipped with supplemental water spray designed to suppress dust. Water must be combined with a surfactant. Operate and maintain machine to minimize dust emissions.	None None None	None None None

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Silica Exposure Control Plan

(xvi) Crushing machines	Use equipment designed to deliver water spray or mist for dust suppression at crusher and other points where dust is generated (e.g., hoppers, conveyers, sieves/sizing or vibrating components, and discharge points). Operate and maintain machine in accordance with manufacturer's instructions to minimize dust emissions. Use a ventilated booth that provides fresh, climate-controlled air to the operator, or a remote control station.	None	None
(xvii) Heavy equipment and utility vehicles used to abrade or fracture silica containing materials (e.g., hoe-ramming, rock ripping) or used during demolition activities involving silica-containing materials	Operate equipment from within an enclosed cab. When employees outside of the cab are engaged in the task, apply water and/or dust suppressants as necessary to minimize dust emissions.	None None	None None
(xviii) Heavy equipment and utility vehicles for tasks such as grading and excavating but not including: demolishing, abrading, or fracturing silicacontaining materials	Apply water and/or dust suppressants as necessary to minimize dust emissions. OR When the equipment operator is the only employee engaged in the task, operate equipment from within an enclosed cab.	None None	None None

Silica Exposure Control Plan

(2) When implementing the control measures specified in Table 1, each employer shall:

- For tasks performed indoors or in enclosed areas, provide a means of exhaust as needed to minimize the accumulation of visible airborne dust;
- For tasks performed using wet methods, apply water at flow rates sufficient to minimize release of visible dust;
- For measures implemented that include an enclosed cab or booth, ensure that the enclosed cab or booth:

    a) Is maintained as free as practicable from settled dust;

    b) Has door seals and closing mechanisms that work properly;

    c) Has gaskets and seals that are in good condition and working properly;

    d) Is under positive pressure maintained through continuous delivery of fresh air;

    e) Has intake air that is filtered through a filter that is 95% efficient in the 0.3 10 µm range (e.g., MERV-1 or better); and

    f) Has heating and cooling capabilities.

(3) Where an employee performs more than one task on Table 1 during the course of a shift, and the total duration of all tasks combined is more than four hours, the required respiratory protection for each task is the respiratory protection specified for more than four hours per shift. If the total duration of all tasks on Table 1 combined is less than four hours, the required respiratory protection for each task is the respiratory protection specified for less than four hours per shift.

Hoffman Bros., Inc.
8574 Verona Road
Battle Creek MI 49014

Date: _____

Daily Pre-Task Planning Worksheet

Job Name: _____ Supt./Foreman: _____

Name of person responsible for completing and reviewing plan with crew: _____

1. At Risk Employees:

New Employees:	New to Jobsite:

2. List Job Task / Activities:

3. List or check Tools & Equipment Needed to Complete Task

Generator ☐	Skid Steer ☐	Traffic Barriers / Signs ☐
Power Cord(s) ☐	Chop Saw ☐	Forklift ☐

4. Potential Hazards

Falls ☐	Moving Equipment ☐	Weather (Heat) ☐
Overhead Loads ☐	Public Traffic ☐	Site Traffic ☐
Heavy Lifting ☐	Air Quality (Silica) ☐	Slips/trips/falls ☐
Bending/Kneeling ☐	Noise Exposure ☐	Confined Space ☐
Chemical Burns ☐	Electrical Shock ☐	
Hot Work (Welding And Cutting ☐	Trucks Backing & Blind Spots ☐	Trenching & Excavations ☐
Concrete Grinding, chipping, cutting ☐	Flying Debris/ Objects in eyes. ☐	Underground and Overhead Utilities ☐
Other:		
Other:		
Other:		

5. Hazard Control / Elimination

Harness & Lanyard ☐	Hard Hats ☐	Respirators ☐
Boots/Gloves ☐	Hearing Protection ☐	Wet Cutting = ☐
Stretching ☐	GFCI Protection ☐	Housekeeping ☐
Three points contact ☐	Fire Extinguisher(s) ☐	Back-up Alarms ☐
Utility Locates ☐	Seat Belt Use ☐	Two person lifts ☐
Safety Glasses/ Face Shield ☐	Sloping/Benching/ Trench box ☐	Traffic Control (signs, cones, barriers, etc.) ☐
Spotters (Overhead Loads & Backing ☐	MSDS Sheets Available ☐	Does work require a Trench Box? ☐
High Visibility Vest & Blind spots ☐	Inspection of tools, equipment, rigging ☐	Get Proper Tools and Equipment ☐
Other:		
Other:		
Other:		

6. Utilities – gas, electrical, fiber optics

Y N N/A

☐ ☐ ☐ 1. Have all utilities been located and/or refreshed? If so by whom? _____

☐ ☐ ☐ 2. Utilities marked every 25' in soil and every 15' on hard surfaces?

☐ ☐ ☐ 3. Are photos prior to digging necessary for surface encumbrances, locate flags and markings?

☐ ☐ ☐ 4. Did you hand excavate to expose live utilities?

☐ ☐ ☐ 5. Are there any overhead utility lines in the work area that are within 10' of operating equipment? If yes, identify safe measures taken to conduct task: _____

_____

_____

_____

7. Traffic Control

Y N N/A

☐ ☐ ☐ 1. Are there any traffic lane closures? If yes, is proper signage, cones, barrels and/or barriers in place? _____

_____

☐ ☐ ☐ 2. Are there any traffic lane shifts or detours? If yes, is proper signage, cones, barrels and/or barriers in place?

_____

☐ ☐ ☐ 3. Are traffic signal persons and traffic escorts needs and do task require communication with traffic control?

☐ ☐ ☐ 4. Are employees adequately protected from public traffic? If no, indicate what additional measures are being taken. _____

_____

_____

_____

8. Confined Space

Y N N/A

☐ ☐ ☐ 1. Will anyone be required to enter into any manholes or enclosed spaces that are classified as a confined space?

If yes, Has air quality testing in confined space been performed and recorded?

☐ Yes ☐ No

9. Heavy Equipment Operation

Y N N/A

☐ ☐ ☐ 1. Has all equipment been inspected prior to start-up?

☐ ☐ ☐ 2. Is proper equipment – type, size, available on-site to complete task safely?

☐ ☐ ☐ 3. Are operators of heavy equipment trained and qualified to operate that specific type of equipment?

☐ ☐ ☐ 4. Do all drivers of DOT trucks, have the proper CDL license and designation to operate that truck in the state or haul specific type of materials?

☐ ☐ ☐ 5. Is all rental equipment in safe operating condition and inspected daily prior to start-up?

Other Comments: _____

_____

_____

Crew Member Signatures:

HOFFMAN BROS. INC.
EXCAVATING CONTRACTORS

Date Created _____

INCIDENT INVESTIGATION REPORT

EMPLOYEE INFORMATION

NAME _____ DOB_____ SS # _____SPOUSE _____

ADDRESS _____ PHONE _____ DOH _____

EMPLOYER NAME _____ TRADE _____ DATE & TIME _____

PROJECT _____ SUPERVISOR _____ EMPLOYEE SIGNATURE _____

INJURY OR ILLNESS - N/A

RESULT: Injury or Illness _____

Amputation_____ Fracture _____ Cut _____ Bruise _____ Sprain/Strain _____ Burn_____ Sliver _____ Frostbite _____ Heat/Cold Stress _____ Contortion _____

Irritation _____ Skin _____ Dust _____ Toxin _____ Phys Agent/Radiation _____ CTD _____ Other _____

Body Part/Organ Affected: _____

Head _____ Eyes_____ Ears _____ Face _____ Neck_____ Shoulder _____ Chest _____ Back _____ Side ____ Abdomen ____ Hip _____ Groin ____ Upper Arm _____

Elbow ____ Forearm _____ Wrist ____ Hand _____ Fingers _____ Thigh _____ Knee ____ Shin/Calf _____ Ankle _____ Foot _____ Toes_____ Organs _____ Other _____

Severity: Report Only _____ First Aid _____ Medical _____ Restricted/Transferred _____ Off Work _____ Death_____ Illness Y/ N _____ Lost Consciousness Y/N _____

Days (Excluding day of accident) Off Work _____ Restricted/Transferred_____ Total Days _____ Dates _____

Health Provider (Name & Address) Physician _____ Hospital _____

INCIDENT OR EXPOSURE

HOW DID INCIDENT OCCUR: _____

INCIDENT: EVENT Causing Problem _____

TYPE: Struck Against _____ Struck By _____ Fall, Elevated _____ Fall, Same Level _____ Slip/Trip _____ Caught In/Under/Between_____ Vehicle _____ Overexert _____

Oxygen Lack _____ Contacted-Electricity _____ Heat _____ Cold _____ Noise _____ Radiation _____ Animal/Insect/Plant _____ Physical Agent_____ Chemical _____

PLACE of Occurrence (Address if possible, or References identifying location) _____

ON or OFF Employer Premises? _____ Date & Time of Occurrence _____ Date & Time Reported _____

SOURCE: Type of Work or Activity when Injured _____

FACTORS: People, Materials, Machines involved incl. Tools, Chemicals _____

AGENCY: Problematic Object & Specific Part or Substance _____

CAUSE & CORRECTIVE ACTIONS

HAZARD CONDITION of Agency: _____

WORK PRACTICE ACT & Safe Procedures Violated: _____

Improprieties - PPE _____ Lockout _____ Crane _____ Vehicular _____ Tool Use _____ Label Directions _____ Operating Procedures _____ Shop Rule _____

Instruction _____ Unauthorized Operation _____ Unsafe Speed _____ Unsafe Position _____ Other _____

PERSONAL FACTOR: _____

Improprieties - Hair ____ Clothes _____ Hearing _____ Sight ____ Limitation _____ Disregard _____ Distracted _____ Nervous _____ Unaware _____ Impaired _____ Other _____

SUPERVISION FACTOR: _____

Improprieties – Instruction _____ Training _____ Enforcement _____ Procedures _____ Tools/Materials _____ Coordination _____ Rushing _____ Other _____

EQUIPMENT/ENVIRONMENT FACTOR: _____

Defective/Inadequate-Guard _____ Safety Control _____ Equipment _____ Tools _____ Inadequate – Light _____ Ventilation _____ Design/Space _____ Other _____

OTHER FACTORS: _____

Upset Conditions (Fire, etc.) _____ Actions of Fellow Employees _____ Actions of 3rd Party _____ Other _____

CORRECTIVE ACTIONS: _____

REPORT SUBMITTED BY		REPORT ACCEPTED & CORRECTIONS AUTHORIZED BY		FOLLOW-UP COMPLETED BY	
DATES	/ /	DATES	/ /	DATES	/ /

HOFFMAN BROS INC.

EMPLOYEE SIGN-OFF SHEET

_____, an employee of **Hoffman Bros Inc.** understands this company safety policy. I also understand that if I have any questions concerning the safety policy or safety in general I may contact the company safety officer for clarification. Further, I understand that safety is everyone's responsibility, including my own.

Signed: _____

Date: _____