HEALTH & SAFETY PLAN

FOR

129 AMBOY AVENUE

WOODBRIDGE, NEW JERSEY

07095

MISSION STATEMENT

Mark Gallagher Concrete Corp. will provide our customers with the highest standards of ethics, performance and professionalism.

OUR COMMITMENT

Safety will always be an integral part of ***Mark Gallagher Concrete Corp.*** Our actions will enhance the safety of our people as well as protect the interests of our customers. We will always be sensitive to public health and the environment by maintaining a steadfast commitment to environmental compliance.

OUR PEOPLE

Our people are our greatest asset. We will provide a challenging yet rewarding work environment that recognizes innovation, integrity and team building.

GOOD WORK PRACTICES FOR WORKING WITH CEMENT

Wet cement is highly caustic and contains skin sensitizing chromium. Contact with wet cement can cause serious skin conditions including allergic reactions and caustic burns. Cement masons and others who work with wet concrete may lose work time or even be unable to continue in the trade because of cement related skin disease.

TO PROTECT AGAINST SKIN DISEASE FROM WET CEMENT:

- Select proper protective equipment and require correct use.
- Require the wearing of long sleeves and pant legs.
- Use butyl or nitrile gloves (not leather or fabric). Gauntlets must be long enough to allow taping under sleeves.
- Use glove liners to make gloves more comfortable.
- Clean or dispose of gloves **daily**. Disposable gloves may be your best choice.
- Ensure the disposal of gloves that are grossly contaminated, damaged or which have cement on the inside.
- Protective boots should be used if there may be significant foot contact.
- Protective knee pads should be worn if the worker will be kneeling on the wet cement.
- Place cement covered clothing in plastic bags for transport.

HAND WASHING:

- 5 TO 7 gallons of running water per worker per day is required for proper hygiene. **Do not** use cement contaminated water to wash.
- Hands should be washed **before** putting gloves on and anytime they are removed.
- Provide PH neutral of acidic soap
  - Soft Soaps: Aloe Vera 80, Cetaphil, Dial, Dove, Gillette Wash, Ivory, Jergens, Lever 2000, Neutragena, Noxema, pHisoderm, Softsoap
  - Bar Soaps: Caress, Dove, Oil of Olay
- Prohibit washing with abrasive soaps or solvents, including alcohol wipes or limonene base cleansers (usually have a citrus odor).

- Discourage the use of lanolin or skin softening agents at work or the use of petroleum jelly to treat chemical burns.
- Gloves should be thoroughly rinsed if they will be reused.
- Discourage the wearing of watches or jewelry on the job. They can trap cement underneath.

HOW TO REMOVE GLOVES CORRECTLY:

- Rinse gloves **before** removing them.
- Hold hands down and loosen both gloves
- Remove the first glove only to the fingers, palm should be covered by the cuff.
- Remove the second glove with the first glove. Both gloves should slip off.
- Handle gloves only by the inside.

HOW RISKS ARE REDUCED:

The effect is only felt over time (hours to years). Protective clothing keeps cement and contaminated water away from the skin. By keeping the skin intact and balancing the PH, any caustic effect can be minimized. Removing dirt and jewelry keep cement from being trapped against the skin.

QUALITY OF EVIDENCE:

- Safety and health experts believe there is a risk reduction.

It is self-evident that contact dermatitis will be prevented if skin does not come in contact with Portland cement. Skin protection programs have been evaluated for effectiveness in other industries and shown to be effective. No specific evaluation has been made of the skin protection program recommended here for construction workers. However safety and health experts believe that applying the same principles demonstrated to be effective in other industries will be effective in construction.

GENERAL SAFETY

Mark Gallagher Concrete Corp. has safety rules to keep you from getting hurt on the job. It is your responsibility to learn these rules and to follow them at all times.

- **NOT** following safety rules may result in disciplinary action up to and including dismissal.
- Report anything you think is unsafe to your supervisor, like damaged or defective equipment.
- All warning signs, safety and security rules **MUST** be followed at all times.
- You **MUST** report all injuries and illnesses to your supervisor right away.
- The use, possession, or being under the influence of illegal drugs or alcohol is not allowed on the job.
- If you do not understand a safety rule or do not know the safe way to do something, stop and ask your supervisor.
- Only trained, qualified operators may use powder actuated tools (PATs).
- Guns, knives (except work knives) or any other type of weapons or explosives are **NOT** allowed on the job at any time.
- Smoking is **NEVER** allowed in battery charging areas or around propane tanks. Gasses from batteries and propane are extremely flammable.
- Fueling forklifts or other motorized equipment with gasoline, diesel fuel or propane must be done **OUTSIDE.**
- Gas **MUST** be kept in an UL approved spark arresting safety cans. Plastic jugs shall **NEVER** be used to store flammable liquid.
- Inappropriate physical and/or verbal conduct of a sexual nature, including staring, gawking, whistling and/or shouting is **STRICTLY FORBIDDEN!**

WEATHER SAFETY

- Drink plenty of fluids. Dehydration can happen in hot or cold weather.
- **DO NOT** wear tight clothes. They can make your body's job of circulating coolant or antifreeze (blood) much harder, like pinching a radiator hose.
- **DO NOT** drink alcoholic beverages before or during work! Alcohol dehydrates (dries out) your body and slows your circulation making you colder or hotter.

- Avoid smoking cigarettes. Nicotine affects your circulation, making it harder to cool down or warm up.
- WHEN IT'S COLD: Dress warmly. Use layers of clothes that you can put on or take off as the temperature changes. Do not forget hats, gloves and warm shoes or boots.
- Most body heat is lost from your head, hands and feet. Frostbite and hypothermia are serious conditions. If you think you're getting either, get where you can warm up, tell your supervisor, and get medical attention if necessary.
- WHEN IT'S HOT: Try to wear light weight and light colored clothes. Light colors reflect heat, dark colors absorb heat. With heat illnesses, you might stop sweating and/or have dizziness, cramps, nausea and intense thirst.
- Heat illnesses are serious conditions. If you or one of your co-workers is having heat illness symptoms, get inside (or wherever you can cool down), tell your supervisor and get medical attention if necessary.

PERSONAL PROTECTIVE EQUIPEMENT

There are different types of PPE for different jobs.

If you don't know what PPE you should be using, ask your supervisor.

There are many kinds of respirators to protect against harmful dusts, mists and fumes. Respirators do not work if they do not fit properly.

FIT TEST YOUR RESPIRATOR BEFORE EACH USE.

1. Put on the respirator.
2. Cup your hands over the mask or otherwise block the flow of air into the mask.
3. Breathe deeply. The mask should collapse towards your face.

When you breathe out, the mask should remain sealed on your face. It fits if it does not leak air from around the edges when you breathe in and out. If it does not fit, tell your supervisor.

You must wear the right gloves when you are exposed to hazardous chemicals, BBPs, cuts or burns.

GLOVE TYPES	USED FOR
Cotton	General protection
Chemical Resistant	Protection from chemical burns, harmful liquids, BBPs
Leather	Heavy duty (dry) protection

When working with liquids, gloves should be cuffed at the top to keep liquids from getting on your arm.

- Hard hats **MUST** be worn (with the brim forward) at all times while on the construction site.
- The suspension of a hard hat must be adjusted to fit snugly and to keep the shell of the hat at least 1 ¼" above the top of your head.
- Proper eye/face protection **MUST** be worn at all times while on the job site.
- You **MUST** wear proper footwear with puncture resistant soles that may also include steel toes and/or metatarsal guards. Footwear must be laced, tied and worn at all times while on the job site.
- Hearing protection **MUST** be worn when there are signs instructing you to do so or you work in an area where you have to shout to be heard by someone less than 2 feet away.
- Plain cotton inserted in the ear is **NOT** acceptable hearing protection.
- You **MUST NOT** share your PPE with anyone else at any time.

CORD SAFETY

The most common cause of on the job electrocutions is using the wrong type of damaged extension cords.

- Check cords carefully **BEFORE** each use.
- If a cord is damaged in any way, is missing a grounding pin or has been spliced together, remove it from service and clearly label or tag it as damaged so no one else uses it.
- Only use cords that are approved for hard or extra hard service. These cords will be marked every two feet. Markings include: S, ST, SO, STO, SJ, SJO, SJT and SJTO. **EXTENSION CORDS SHOULD NOT BE USED AS PERMANENT WIRING.**
- If any equipment or cord gives you even a slight shock when you touch it, unplug it and tell your supervisor right away. When using adapters, you must screw the outlet cover plate screw through the grounding lead, to ground the connection.
- Grounding pins will not protect you unless they are connected to a grounding pin receptacle. Approved cords will be three wires (grounding), stranded wiring, with a protective covering. They will also have strain relief devices, grounding pins and grounding pin receptacles.
- All portable tools that are not double insulated (marked "double insulated" or has double insulated symbol) must have a grounding pin. If not, remove the tool from service.
- If someone is being shocked, do not touch them. Turn off the power or unplug the cord. If you can't do this, use a dry piece of rope or wood (broom handle) to pry the cord or tool away from the victim.
- Water conducts electricity! **NEVER RUN CORDS THROUGH STANDING WATER.**

To keep cords safe and free of damage:

1. Pull the plug not the cord.
2. Never alter a GFCI or grounding pin.
3. Don't yank cords around sharp corners.
4. Don't leave cords where they can be run over.

USE CORDS LONG ENOUGH FOR THE JOB. DO NOT "STRING" (CONNECT) CORDS TOGETHER.

ACCIDENTS AND EMERGENCIES

Accidents happen. Being prepared can be the difference between life and death. ***Mark Gallagher Concrete Corp.*** keeps well-stocked first aid kits, fire extinguishers and posts emergency phone numbers at every job site.

You must know:

1. Where the first aid kits are kept.
2. Where phones and emergency numbers are posted.
3. Where fire alarms and/or extinguishers are located.
4. Emergency evacuation routes to get out of the building quickly.

You must also know:

- Blood borne diseases or pathogens (BBPs) like HIV and Hepatitis can be present in body fluids including blood and saliva.
- To be safe, you **MUST ASSUME** that all body fluids have BBPs in them. Do not render first aid unless you have been trained to do so.
- You should **ALWAYS** wear latex (or rubber) gloves and safety glasses with side shields when you may come in contact with someone else's body fluids.
- When calling for emergency help, make sure to give:
    1. The type of emergency – fire, medical, other.
    2. Your name and the phone number you are calling from.
    3. The exact location of the victim.
- Send someone else to get or call for help. Wait calmly with the victim until help arrives. **DO NOT** give the first aid **unless** you have been trained to do so. If you do take action you are doing so as a "Good Samaritan", **not** as a representative of the company.
- **DO NOT** move a victim unless they are in immediate danger. If you must move them, use the clothes drag method:
    1. Grab the victim's clothes at the shoulder.
    2. Support their head between your forearms.
    3. Drag them to safety by their clothes.

A "weather watch" means conditions are right and that type of weather might happen. A "weather warning" means that type of weather is happening in the watch area.

If you can hear thunder, you are close enough to get hit by lightning.

If stuck outside, find low ground away from tall or metal objects. Squat with your heels together.

FIRE SAFETY

Fire needs four things to burn:

Fuel - Anything that will burn; solid, liquid or gas.

Heat - The energy to increase the temperature of the fuel to the point fire starts.

Oxygen – Fire needs about 16% oxygen, the air we breathe is about 21%.

Chemical Chain Reaction – When heat, oxygen and fuel come together in the right amounts and conditions to start a fire.

IF ONE OF THESE IS MISSING, FIRE WILL NOT BURN!

There are three basic types of fires. They are rated by the type of fuel that is burning.

Class A - Ordinary solid fuels like paper, wood, cloth, rubber and some plastics
Class B - Flammable liquids/gasses like gasoline, paints, propane, etc
Class C - Electrical fires

Extinguishers work on different types of fires. The ratings are on the extinguisher. Some work on several types of fires and are marked with multiple ratings such as AB, BC, or ABC.

To operate a fire extinguisher, remember **P.A.S.S.**
Pull the pin.
Aim at the base of the fire.

Squeeze the trigger.
Sweep from side-to-side.

We have an emergency action plan that includes:

1. Escape routes and procedures,
2. Mapping these routes and exits,
3. A head counting procedure to make sure everyone is out,

YOU MUST BE FAMILIAR WITH THIS PLAN.

IF A FIRE IS SPREADING, BLOCKING YOUR EXIT, OR YOU DO NOT HAVE A PROPER FIRE EXTINGUISHER, DO NOT TAKE CHANCES....GET OUT!!!

HAZARD COMMUNICATION

Paint thinner, concrete products, adhesives, coatings and other chemicals that we use every day may contain chemicals that could hurt you. That is why we have a written "Hazard Communication Program" (HAZCOM) that includes:

Hazard Evaluation:
Chemical manufacturers finding out what and how the things they make are hazardous.
Container Labeling:
Making sure that all hazardous materials have product warning labels.
Material Safety Data Sheets: (MSDS)
That have detailed information about the hazardous material we may handle.
Training:
So that you can do your job safely.

The written HAZCOM program and MSDSs are available for your review during all working hours. You should review the MSDS before using a product for the first time.

- ***Mark Gallagher Concrete Corp.*** keeps a MSDS on every hazardous material you may handle. You must know where the MSDSs are located

and know how to read them.

- All hazardous material containers must have labels that describe the hazardous material, how it is dangerous (hazard warnings), and the name, address & phone number of the manufacturer.
- If something is poured into another container (spray bottle, bucket, etc.) it must be labeled. If you can't read, or there is no label on a container, **DO NOT** use it. Tell your supervisor immediately.
- **DO NOT** store chemicals near heat, electrical equipment, or in direct sunlight. Chemicals that should not be mixed (like ammonia & bleach), should not be stored together.
- Nothing should be blocking or covering container labels.
- Dispose of all chemicals the way you are instructed to on the label or MSDS. **DO NOT** just pour them down the drain, flush them in the toilet or pour them on the ground.
- **DO NOT** try to guess what is in unlabeled containers by sniffing what is in them. A small sniff can be **DEADLY!**
- Never smoke while mixing, spraying or pouring chemicals.
- Never mix chemicals without carefully reading the instructions. **NEVER MIX AMMONIA & BLEACH; THE FUMES FROM THIS COMBINATION ARE DEADLY!**
- Never handle or mix chemicals without wearing the necessary Personal Protective Equipment (PPE).

HOUSEKEEPING

How neat and clean we keep our workplace shows our level of pride and professionalism. It also helps keep our workplace safe.

- Keep work areas, walkways, stairs and aisles **FREE** of clutter like waste, trash, tools, hoses and cords.
- **SECURE** loose materials and scrap that might blow around, especially on roofs or other heights.
- Keep debris and stored material at least 10' away from deck edges and at least 6' from floor and/or roof openings.

- Place oily rags and swabs in approved covered receptacles.
- Pick up tools, hoses, etc. after each use.
- Remove or flatten protruding nails from scrap lumber.
- Clean up (or spread absorbent material on) spills **IMMEDIATELY**, especially dry wall mud or sprinkler pipe leaks/grease on smooth (tile, painted concrete or slick finished concrete) floors.
- If you have to leave the area or it is not practical to finish, clearly mark the area to call attention to it. This can be done with signs, buckets, boxes or anything else that will call someone's attention to the area.
- **NEVER** store anything in front of or in any way blocking exits, fire fighting/first aid and emergency equipment or electrical panels.

PREVENTING SLIPS, TRIPS and FALLS

Most slips happen when either your shoes or what you are walking on is wet or slippery.

- **BE CAREFUL** if it is snowing, icy, raining or wet/muddy outside, especially when entering smooth floored areas from outside.
- Be **EXTRA CAREFUL** when walking through areas where drywall is being finished or sprinkler heads are being cut.
  WATCH YOUR STEP! Check for ice, mud or other slick spots in front of the door when getting in and out of vehicles.
- Wear proper slip resistant shoes that are laced and tied at all times.
- **DO NOT** leave spills or slippery spots alone for the next person to slip on. Clean up all spills and/or slip hazards right away, or call for help and wait until help arrives.
- If you have to leave the spot (like to get a mop), clearly mark the area to call attention to it. This can be done with signs, buckets, boxes or anything else that will call attention to the slippery area.
- Make sure electrical cords are not trip hazards. **NEVER** leave cords on a floor where others might walk without the cord being taped down.
- **DO NOT** carry loads that block your vision. Get someone to help you carry the load or guide you while you carry it.
- Take stairs one at a time while keeping one hand on the handrail. **DO NOT** run on, skip or jump stairs.

NEVER JUMP FROM:

- The bed of a pick-up
- The cab of a van or truck
- A loading dock or any other elevated surface. Use the stairs!

MATERIAL HANDLING

Lifting light things carelessly and heavy things the wrong way can cause back injuries. When you lift, use proper techniques.

- Square up to the object as close to it as you can. Your feet should be slightly apart with one foot just behind the other.
- Squat down to the load; bend your knees while keeping your back straight and as close to vertical as possible.
- Get a good grip using your whole hand, not just your fingers. Gloves should be worn when handling material.
- Materials to be lifted should be gripped at opposite corners.
- Lift with your legs while keeping your back vertical and arms and elbows close to your body.
- Shoveling is the same as lifting, so the same rules apply.
- Plan before you lift. Check the load for weight, sharp edges, splinters, etc. Make sure your path is free of trip hazards.
- If a load is hard to lift and/or handle alone, like plywood or sheetrock, **GET HELP!**
- **NEVER** reach over something to lift something else. Either move what is in your way or go around it.
- **NEVER** lift or handle material by the packing band.
- **DO NOT** twist your body while handling a load. Move your feet instead. This is really important when shoveling or throwing trash in a dumpster or truck.
- When un-banding material, wear gloves, safety glasses and stand to the side of the band, **NEVER** in front of it.
- When hauling water (or other liquids), **DO NOT** fill 5 gallon buckets more than ½ full. They will be easier to handle and less likely to spill.
- Hand trucks and other material handling equipment are recommended when handling heavy loads.

TOOL and MACHINE SAFETY

- When tools or equipment are designed to have guards, the guard **MUST** be on when the tool or equipment is in use. **NEVER ALTER OR BYPASS MACHINE GUARDS IN ANY WAY.**
- In-going nip-points (the point where a belt or chain is pulled onto a gear or wheel) **MUST** be guarded.
- Grinders **MUST** have side shields over the end of the stone or wire wheel and tool rests within ⅛" of the stone or wheel.
- Circular saws must have guards above and below the base plate that automatically return to the covering position when the saw is pulled out of the work.
- Keep saw blades adjusted so they are deep enough to do the work, but no deeper.
- Use push sticks or other hand tools to help keep your hands out of the danger zone.
- Carefully inspect all pneumatic tool lines and connections for damage before each use.
- Make sure pneumatic tools are firmly connected to the hose before using the tool.
- Carefully inspect all chains, slings, hooks and latches before each use.
- **NEVER** use wrenches that have been sprung to the point where slippage occurs.
- Impact tools, chisels, etc., **MUST NOT** have "mushroomed" heads.
- Gas cylinders that are not in use must be secured in an upright position with valve protection caps on.
- Gas cylinders that are in use must be secured in a cart with the regulators attached.
- Oxygen and acetylene cylinders **MUST** be separated by at least 10' when not in use.
- **DO NOT** wear gloves or loose clothing (especially clothes with draw strings) when working on or with moving machinery.
- If you have long hair, tie it back or put it up under a hat, before working with, on or around moving machinery.

LOCKOUT/TAGOUT

If you are in a situation where the unexpected start up of machinery, electrical current or the release of stored energy could hurt you, lockout / tagout (L.O.T.O.) rules must be followed:

1. To L.O.T.O. a piece of equipment:
   Turn it off. Press stop, flip the switch, close the valve, etc.
2. Isolate it from the energy source. Unplug it; flip the circuit breaker off, close the main valve, etc.
3. Put on and lock (and/or tag) energy control devices.
   TURN IT OFF....ISOLATE IT....LOCK IT!
4. Control stored energy like that found in springs, hydraulic systems, raised or elevated parts, etc. by repositioning, blocking or bleeding down.
5. Make sure energy is off, stored energy is controlled and all moving parts (especially moving saw blades) have stopped before you start working on or near them.

- Before restarting the equipment, make sure:
  1. All tools have been removed.
  2. All guards are attached.
  3. Everyone knows you are about to start the equipment.

NEVER TAMPER WITH OR REMOVE SOMEONE ELSE'S LOCK OR TAG.
LEAVE IT ALONE!

- If more than one person needs to L.O.T.O. equipment, each shall place his/her own personal lock on the energy isolating device(s) or a multiple L.O.T.O. device (hasp).
- If the equipment or machine will not accept a multiple L.O.T.O. device, a single lock may be used. The single key must be placed in a lockout box or cabinet that allows the use of multiple locks to secure it. Each employee will then use his/her own lock to secure the box or cabinet. As each person no longer needs to keep their lockout protection, that person will remove their lock from the equipment, multiple L.O.T.O. device (hasp), box or cabinet.

- There are specific procedures for switching L.O.T.O. between shifts. You must be familiar with these procedures.

LADDER SAFETY

- When you need a ladder, use a ladder. **DO NOT** use boxes, chairs or buckets.
- Set up ladders with the feet one foot out (from the base of the vertical support) for every four feet up.
- The top of the ladder must extend at least three feet beyond the landing area.
- Lock, tie or otherwise attach the ladder near the top to prevent movement.
- **NEVER** use bricks, blocks or other unstable objects for ladder footings.
- Set up ladders on level, stable ground and **NOT** in front of closed doors.
- **NEVER** reach over an arm's length beyond the side rails of a ladder.
- Be sure stepladders are fully open and the spreaders are locked before climbing.
- **NEVER** use a stepladder like a straight ladder.
- **DO NOT** work sideways from a stepladder. It should be facing what you need to reach.
- **NEVER** sit, climb or stand on the top two steps/rungs of a stepladder.
- **NEVER** jump from a ladder. Climb all the way down!
- Use barricades, cones or warning tape around the ladder whenever possible. This keeps people from hitting the ladder or getting hit if you drop something.
- When climbing a ladder you must keep three points of contact with the ladder at all times.

SCAFFOLD SAFETY

- All scaffolds 10' * or more above the floor must have the following on all open sides and ends:
  ***Minimum requirements. Some states may have stricter requirements.**
- A top rail 38" – 45" above the work platform.

- A mid rail half way between the top rail and the work platform.
- A toe board at least 3½" high.
- A screen with holes no bigger than ½" must be installed between the tow board and top rail on all scaffolds where people work or pass underneath.
- Railings must be supported at a maximum of every 8'.
- Guardrails are not required on the side of a scaffold platform that is less than 14" from the face of the work.
- Work platforms must be at least 18" wide. They may be either fabricated scaffold platforms or scaffold grade planks.
- Scaffold platforms must be able to support, without failure, their own weight and at least four times the intended load.
- Planks must extend at least 6" but no more than 18" beyond the end of their support.
- Scaffold planks should overlap a minimum of 12".
- It is especially important to keep scaffold platforms neat and free of trash and/or clutter.
- Supported or frame scaffolds with a height to base width ratio of more than 4:1 must be restrained by guying, tying or bracing.
- When scaffold platforms are more than 2' above or below a point of safe access, ladders set up so they will not tip the scaffold, must be used.
- Climbing cross-braces and/or scaffold frames to get on a scaffold is strictly forbidden.
- A designated "competent person" must inspect and approve all scaffolds before every work shift and after every change in the scaffold.

GUARDING FLOOR and WALL OPENINGS

Standard guarding systems include:

1. A top rail between 39" and 45" above the work surface.
2. A mid rail halfway between the top rail and the work surface.
3. Toe boards when falling material may cause a hazard.

- All open sided floors and/or openings where someone could fall 6' or more need a standard guarding system.
- Guardrails **MUST** be supported at least every 8', secured at both ends and strong enough to support a 200 pound force in every direction.
- Wire rope guarding **MUST** be kept tight, free of sags and clearly flagged

every 6'.

- Every window wall opening, from which there is a drop of more than 4', and the bottom of the opening is less than 3' above the work surface, **MUST** be guarded.
- Every manhole opening **MUST** be guarded by a standard manhole cover. While the cover is not in place, the opening **MUST** be constantly attended by someone or protected by a removable guarding system.
- If the guarding system interferes with the work it may be temporarily removed if all employees exposed to a fall are tied off and the system is replaced as soon as possible.
- Floor, roof and skylight openings, bigger than 2" in their smallest dimension, **MUST** have a guarding system or be offset so that a person cannot walk straight into the opening.
- Drywall, sheathing or other like materials **MUST NEVER** be used as opening covers.

FALL PROTECTION

Fall protection is required when employees could fall 6' or more. Certain specific activities like steel erection have different minimum height requirements. If you are unsure about the type and/or need for fall protection, ask your supervisor.

- Fall protection is required **REGARDLESS** of height when employees are working above or next to dangerous equipment.
- Conventional types of fall protection include guardrail systems, covers, safety nets and personal fall arrest (PFA) systems.
- Before using personal fall arrest equipment, you **MUST** be trained. You will need to know the equipment's limits, proper hook-up, anchoring, and tie off techniques. You must also be trained so that you know how to safely use, inspect and store the equipment.
- Body belts and non locking snap hooks are **NOT** acceptable as part of a personal fall arrest system.
- Carefully inspect all fall protection equipment before each use. **DO NOT** use damaged equipment. Turn it into your supervisor immediately.

- Adjust harnesses so that they fit snugly with the flat side of the "D-Ring" positioned between the shoulder blades.
- Free fall length **MUST BE NO LONGER** than 6'. Shock absorbing lanyards however are designed to stretch another 3½" to slow the fall before stopping it.
- Most "Self-Retracting" lifelines or lanyards limit the fall distance to 2'.
- **NEVER** connect two snap hooks together.
- Consider the fall distance to the hazard below. **MAKE SURE** to adjust your lanyard/lifeline (or use a shorter one) so that it stops your fall, instead of the hazard.
- When picking anchorage, **MAKE SURE** it can hold at least 5,000 pounds (minimum anchorage for self retracting lines that limit fall distance to 2' is 3,000 pounds).
- **DO NOT** wrap your lanyard/lifeline around anything with sharp edges that may cut the lanyard/lifeline.
- Make sure to anchor to a point above your "D-Ring". The higher your anchor, the shorter your fall. Anything below the "D-Ring" adds to your fall distance.

TRAFFIC CONTROL

Working on our nations' roads and highways is one of the most dangerous occupations in the country. That is why ***Mark Gallagher Concrete Corp.*** has developed a written traffic control plan that addresses:

- **All** employees are required to wear orange or fluorescent (reflective at night) vests that make them visible from at least 1,000'.
- If you are working as a flagger, **YOU MUST BE CERTIFIED!**
- **NEVER** stand directly in front of or turn your back on an oncoming vehicle.
- Have an escape route planned in case of emergency.
- Pre-arrange a signal (a whistle, air horn blast, etc.) to warn other workers in case of emergency.
- **NEVER** leave your position unattended; wait for a replacement.
- You **MUST** wear a shirt under your vest at all times.
- Keep traffic control signs clean and warning lights working.

- Remember to remove "Flagger Ahead" or other warning signs when not needed.

HEAVY EQUIPMENT SAFETY

- **NEVER** operate equipment of any kind unless you have been trained to do so.
- Equipment must be kept in good working order. If it is damaged, defective or not running right, tell your supervisor immediately.
- If the equipment has roll-over protection (ROPS), seat belts **MUST BE WORN** whenever the equipment is being used.
- All machines **MUST** be turned off with "raisable" parts lowered, and brakes set when they are not in use or unattended.
- Equipment operators **MUST** make sure back-up alarms work properly at all times.
- Operators **MUST** secure all loose items in their equipment cab.
- Be careful around heavy equipment especially when wearing hearing protection or headphones.
- **NEVER** distract equipment operators.
- **NEVER** jump from equipment or the cab or a van or truck. Always maintain 3 points of contact when getting on/off, in/out of vehicles and/or equipment.
- **NEVER** walk behind or along-side moving equipment.
- **NEVER** walk, stand or work under raised/suspended loads.
- **DO NOT** put any part of your body in or around moving parts.
- Smoking is **NOT** allowed around refueling equipment.
- You **MUST** keep the operator in sight when guiding equipment back.
- **NEVER** stand next to or near equipment being loaded.
- Look out for falling trees and limbs while grubbing or clearing a site.
- "Hitchhiking" or riding on equipment in other than the operators seat, is **NOT** allowed.

CRANE SAFETY

- Only people that have been specially trained and certified are permitted to operate cranes.
- Barricades around the swing area of a revolving cab must be used when

operating a crane in areas where pedestrians or traffic pass close by.

- **NEVER** operate cranes closer than 10' from power lines. Lines carrying greater than 50,000 volts require greater distances.
- Before lifting, carefully inspect all rigging, slings, hooks, etc. Report any damage or defects to your supervisor right away.
- **NEVER** work or stand under suspended loads.
- Watch out for materials that could fall on you if they were hit by a suspended load.
- Make sure to provide yourself a way out when directing load drops.
- Riding on the ball, hook, rigging or load is **NOT** allowed at any time!
- **NEVER** approach a load (unless tag lines are being used) until the load has come to a complete stop.
- **NEVER** use crane cables as a sling. Cushion rigging from sharp edges or corners that may damage it.
- When it is necessary to guide a suspended load, tag lines must be used.
- **DO NOT** distract the crane operator, especially while the load is in the air.
- Make sure you are familiar with all hand signals and whistles. If you are not sure, ask your supervisor. Remember, only one signalman may be used at a time.

TRENCH SAFETY

- Locate all underground utilities before digging. Call the Utilities Protection Center (UPC) at least 72 hours before digging to have utility companies mark their lines.
- When digging, make sure to keep all excavated materials and/or other stored materials, at least 2' from the edge of the trench.
- Make sure to direct surface water (rain runoff) away from the trench.
- Use barricades, signals and/or stop logs to keep traffic and equipment away from the edge of the trench.
- Any trench 5' or deeper must be of one of the following:
    1. Sloped
    2. Benched
    3. Shored

4. Shielded

- A designated "competent person" must inspect and supervise all trenching and/or excavating on a daily basis.
- The competent person must have knowledge of: the OSHA codes/rules about trenches, soils analysis, protective systems and authority and control of the workforce.
- The air in and around a trench must be regularly tested by the "competent person". If a hazardous condition exists or could develop. Emergency rescue equipment must be close by.
- You should **NEVER** get in a trench that is not being supervised by a designated "competent person".
- Remember, everyone exposed to traffic **MUST** wear reflective vests.
- The edges of a trench 6' or deeper must be protected by proper guardrails when the edge of the trench cannot be easily seen.
- Ladders, ramps or other safe means of exiting the trench need to be within 25' of workers in the trench.
- When providing walkways across trenches 6' deep or deeper, proper guardrails must be installed on the walkways.
- In the event you encounter someone caught in a trench cave-in, call for help, **DO NOT** jump in and try a rescue.

CONFINED SPACES

A "confined space" is large enough to enter, hard to get in and out of and cannot be worked in for long periods of time.

Examples of confined spaces include:

1. Trenches
2. Tanks
3. Elevator Shafts
4. Boilers

Some confined space dangers include:

1. Not enough oxygen in the air

2. Flammable or poisoned air

- Keep in mind that many poisonous gasses are heavier than air so while the air in one part of a confined space may be OK; it may be deadly in another part.
- The air in a confined space **MUST** be tested before anyone enters it. It must also be tested at regular intervals while they are in the space.
- Rescuing someone in a confined space can be very difficult. This makes working in confined spaces even more dangerous.
- Only people that have been specifically trained may enter confined spaces.
- Confined spaces **MUST** be marked with warning signs to keep out people that have not been trained.
- You must never work alone when working in or around a confined space.
- **NEVER** smoke or use tools that might spark when working in or around confined spaces.
- **DO NOT** attempt to rescue someone in a confined space by yourself. **GET HELP** instead.

DRY CUTTING & GRINDING

That cloud of dust you see when a worker cuts or grinds concrete, brick or stone is not just harmless dust... It contains crystalline silica... and **IT CAN KILL.**

Most crystalline silica is in the form of quartz. Common sand is almost 100% quartz. Fine particles created by cutting and grinding can get deep into the lungs. Most concrete and masonry products contain large amounts of sand.

When you inhale the dust, silica particles scar your lungs, causing a disabling, irreversible, and incurable lung disease called silicosis. The good news is that silicosis is 100% preventable. You can work with silica-containing materials in ways that **do not** result in exposure to dust.

Some silica-containing materials are:

- asphalt
- block
- brick
- ceramic tile

- concrete
- granite
- grout
- joint compound
- mortar
- pavers
- roof tiles
- sand slate
- some siding
- terrazzo

TYPES OF SILICOSIS AND RELATED SYSMPTOMS

There are three types of silicosis:

- **Acute Silicosis** – can occur after only weeks or months of exposure to very high levels of crystalline silica. Death can occur within months.
- **Accelerated Silicosis** – Results from exposure to high levels of crystalline silica and occurs 5 to 10 years after exposure.
- **Chronic Silicosis** – usually occurs after 10 or more years of exposure to crystalline silica at low levels. This is the most common type of silicosis.

Symptoms of Silicosis

Silicosis begins with few, if any, symptoms. Once present, these symptoms can include shortness of breath, severe cough, wheezing, and chest tightness.

Breathing dust containing crystalline silica has also been linked to other diseases such as tuberculosis, kidney disease, and lung cancer. Symptoms can include fever, weight loss, and night sweats. These symptoms can become worse over time, leading to death.

New Jersey law requires that doctors and advanced practice nurses report cases of silicosis to the New Jersey Department of Health and Senior Services (NJDHSS).

HOW TO PREVENT SILICA EXPOSURE

The key to preventing silicosis is to keep dust out of the air. Dust controls can be

as simple as a water hose to wet the dust before it becomes airborne. Employers and employees should use the following methods to control respirable crystalline silica dust:

- Recognize when silica dust may be generated and plan ahead to eliminate or control the dust at the source.
- Provide workers with training that includes information about health effects, work practices, and protective equipment for respirable crystalline silica.
- Use engineering controls such as local exhaust ventilation (with dust collectors) or wet methods to prevent the release of dust into the air.
- Routinely maintain dust control systems to keep them in good working order
- **Do not** cause dust to become airborne during clean-up. Remove dust from equipment with a water hose or wet-wiping rather than with compressed air. Use vacuums with high-efficiency particulate air (HEPA) filters, or use wet sweeping instead of dry sweeping.
- Minimize exposures to nearby workers by using good work practices, such as marking and positing the boundaries of work areas where exposure to airborne dust can occur.
- Wear disposable or washable protective clothes at the worksite.
- Shower if possible and change into clean clothes before leaving the worksite to prevent contamination of cars, homes, and other work area.
- Conduct air monitoring to measure worker exposures and ensure that controls are providing adequate protection for workers.
- Provide annual medical examinations for all workers who may be exposed to respirable crystalline silica.
- Use proper respiratory protection when engineering controls cannot keep silica exposures below the NIOSH Recommended Exposure Limit (REL). Respirators should not be the primary method of protection. If engineering controls cannot keep dust levels below the NIOSH REL, then respirators should be used.

TIPS FOR CONTROLLING DUST

- Use the dust collection systems available for many types of dust-generating equipment. When purchasing equipment, look for dust controls.
- Use local exhaust ventilation to prevent dust from being released into the

air. Always use the dust control system, and keep it well maintained.

- **Do not** use equipment if the dust control system is not working properly.
- Use equipment that provides water to the blade or grinder when sawing or grinding concrete or masonry. Be sure to only use blades and abrasive wheels that are rated as safe for use with water.
- Keep in mind that dust levels can remain high for some time even after cutting, grinding, or sweeping has stopped.