شركة أحمد حسن المرهون وإخوانه للتجارة والمقاولات

Ahmed H. Al-Marhoon & Bros Co. For Trading & Contracting

Ready Mix Concrete خرسانة جاهزة

Al Marhoon Ready Mix Concrete

Health & Safety Manual

www.almarhoon.com.sa

Contents

The Responsibilities

Management

- Ensure the business complies with all legislation relating to health and safety
- Provide information, instruction and training to enable all workers to work safely
- Provide appropriate safety equipment and personal protective equipment

Employees

- Follow safe work procedures, instructions and rules
- Participate in safety training
- Report all injuries and incidents
- Use safety equipment and personal protective equipment as instructed

Health & Safety Policy Statement

- **Al Marhoon Ready Mix Concrete is committed to providing and maintaining a safe and healthy workplace for all employees, contractors and clients.**

- **It is the policy of the company to provide the adequate training for all employees to reduce the occurrence of accidents or health related concerns.**

- **Employees must report all accidents, injuries, and unsafe conditions to their supervisors. The management will take disciplinary action against employees who wilfully or repeatedly violates workplace safety rule.**

Our goal is to provide a safe and healthy work environment that is free from workplace injury and illness. This will only be achieved through the participation, co-operation and commitment of everyone in the workplace. Compliance with the safety rules will be required of all employees as a condition of employment.

Chairman:

Mr. Ahmed Al Marhoon

Hazards & Solutions

According to OSHA (Ocupational Saftey and Health Adminstration)

The Potential Hazards for workers in Concrete Manufacturing (OSHA 3221):

- Eye, skin and respiratory tract irritation from exposure to cement dust
- Inadequate safety guards on equipment
- Inadequate lockout/tagout systems on machinery
- Overexertion and awkward postures
- Slips, trips and falls; and
- Chemical burns from wet concrete.

Cement Dust

Hazard: Exposure to cement dust can irritate eyes, nose, throat and the upper respiratory system. Skin contact may result in moderate irritation to thickening/cracking of skin to severe skin damage from chemical burns. Silica exposure can lead to lung injuries including silicosis and lung cancer.

Solutions:

- Rinse eyes with water if they come in contact with cement dust and consult a physician.
- Use soap and water to wash off dust to avoid skin damage.
- Wear a P-, N- or R-95 respirator to minimize inhalation of cement dust.
- Eat and drink only in dust-free areas to avoid ingesting cement dust.

Wet Concrete

Hazard: Exposure to wet concrete can result in skin irritation or even first-, second- or third-degree chemical burns. Compounds such as hexavalent chromium may also be harmful.

Solutions:

- Wear alkali-resistant gloves, coveralls with long sleeves and full-length pants, waterproof boots and eye protection.
- Wash contaminated skin areas with cold, running water as soon as possible.
- Rinse eyes splashed with wet concrete with water for at least 15 minutes and then go to the hospital for further treatment.

Machine Guarding

Hazard: Unguarded machinery used in the manufacturing process can lead to worker injuries.

Solutions:

- Maintain conveyor belt systems to avoid jamming and use care in clearing jams.
- Ensure that guards are in place to protect workers using mixers, block makers, cubers and metalworking machinery such as rebar benders, cutters and cage rollers.
- Establish and follow effective lockout/tagout procedures when servicing equipment.
- Be sure appropriate guards are in place on power tools before using them.

Falling Objects

Hazard: Workers may be hit by falling objects from conveyor belt systems, elevators or concrete block stacking equipment.

Solutions:

- Avoid working beneath cuber elevators, conveyor belts and stacker/destacker machinery.
- Stack and store materials properly to limit the risk of falling objects.
- Wear eye protection when chipping and cleaning forms, products or mixers.

Lifting Procedures

- Plan the move before lifting; remove obstructions from your chosen pathway.
- Test the weight of the load before lifting by pushing the load along its resting surface.
- If the load is too heavy or bulky, use lifting and carrying aids such as hand trucks, dollies, pallet jacks and carts, or get assistance from a co-worker.
- If assistance is required to perform a lift, coordinate and communicate your movements with those of your co-worker's.
- Position your feet 6 to 12 inches apart with one foot slightly in front of the other.
- Face the load.
- Bend at the knees, not at the back.
- Keep your back straight.
- Get a firm grip on the object with your hands and fingers. Use handles when present.
- Never lift anything if your hands are greasy or wet.
- Wear protective gloves when lifting objects with sharp corners or jagged edges.
- Hold objects as close to your body as possible.
- Perform lifting movements smoothly and gradually; do not jerk the load.
- If you must change direction while lifting or carrying the load, pivot your feet and turn your entire body. Do not twist at the waist.
- Set down objects in the same manner as you picked them up, except in reverse.
- Do not lift an object from the floor to a level above your waist in one motion. Set the load down on a table or bench and then adjust your grip before lifting it higher.
- Slide materials to the end of the tailgate before attempting to lift them off a pick-up truck. Do not lift over the walls or tailgate of the truck bed.

Protective Equipment

- Do not paint or drill holes in hard hats.
- Do not wear hard hats that are dented or cracked.
- Do not were anything under a hard hat, such as baseball cap and shower cap, except for manufacturer approved liners.
- Wear safety glasses, goggles or face shields when operating chippers or grinders.
- Wear face shields over goggles or safety glasses during open gas cutting or welding operations.
- Wear chemical goggles when using, applying or handling chemical liquids or powders from containers labeled "CAUSTIC" or "CORROSIVE."
- Do not continue to work if your safety glasses become fogged. Stop work and clean the glasses until the lenses are clear and defogged.
- Wear a welding helmet or welding goggles during welding operations.
- Wear dielectric gloves when working on electric current.
- Wear ear plugs or ear muffs in areas posted "Hearing Protection Required."

Conveyers

- Do not climb over or walk on a conveyer.
- Do not make repairs or adjustments on a moving conveyer. TURN IT OFF--LOCK IT OUT (Follow LOCKOUT/TAGOUT procedures).
- Wear a safety helmet when working under a conveyer.
- Keep hands and feet away from an operating conveyer.
- Do not step between rack and loader/unloader.
- Do not stand in front of rack conveyer while loader is in operation.

Hazardous Materials

- Follow the instructions on the label and in the corresponding Material Safety Data Sheet (MSDS) for each chemical product used in your workplace.
- Do not use protective clothing or equipment that has split seams, pin holes, cuts, tears, or other signs of visible damage.
- Each time you use your gloves, wash your gloves before removing them using cold tap water and normal hand washing motion. Always wash your hands after removing the gloves.
- Do not use chemicals from unlabeled containers and unmarked cylinders.
- Do not perform "hot work", such as welding, metal grinding or other spark producing operations, within 50 feet of containers labeled "Flammable" or "Combustible."
- Do not drag containers labeled "Flammable."
- Do not store chemical containers labeled "Oxidizer" with containers labeled "Corrosive" or "Caustic."
- Always use chemical goggles and a face shield before handling chemicals labeled "Corrosive" or "Caustic."

LOCKOUT/TAGOUT

NOTE: Devices such as padlocks shall be provided for locking out the source of power at the main disconnect switch. Before any maintenance, inspection, cleaning, adjusting or servicing of equipment (hydraulic, electrical, mechanical or air) that requires entrance into or close contact with the machinery or equipment, the main power disconnect switch or valve, or both, controlling its source of power or flow of material, shall be locked-out or blocked off with a padlock, blank flange or similar device.

- Do not perform any maintenance, inspection, cleaning, adjusting or servicing of any equipment without following the employer lockout / tagout program.
- If required to work on powered equipment (hydraulic, electrical, air, etc.), you must have your personal padlock with your name on it and personal key on your person at all times.
- Disconnect and padlock all machine power disconnects in the off position before removing guards for the purpose of working "ON" or "IN" the machinery or its approaching unguarded parts. (NOTE: When more than one employee is working on a single piece of equipment, each employee must use his own padlock along with lock-out tongs to lock out the equipment. When the work is completed, he must remove only his lock.)
- Do not commence equipment repair or maintenance work until you have verified that the tagged/locked out switch or control cannot be overridden or bypassed.
- Replace all guards before removing personal padlocks from the control.
- Do not use or remove another employee's protective lock. Do not remove a lock from equipment unless you placed it there.
- Before machinery is put back into use after LOCKOUT/TAGOUT, give a verbal announcement/sound warning to fellow employees.

MIXERS

- Do not operate the mixer unless a safety grid is over the mixer and guards are over the belt and gears.
- When cleaning or performing maintenance inside the mixer, pull the motor starter and "LOCK" in the "OFF" position and keep the key in your pocket. (Follow LOCKOUT/TAGOUT and Confined Space Entry Procedures.)
- Do not use an iron or steel hammer on hardened metal parts, such as molds or mixer parts. Use lead or brass hammers.
- Do not reach into the mixer while it is in motion.
- Before starting a mixing machine, remove all tools, bars, etc., on the machine or in the mixer.

Confined Spaces

Hazard: Mixers and ready-mix trucks have confined spaces that pose safety risks for workers.

Solutions:

- Follow established procedures for confined space entry and work to assure safety.
- Guard against heat stress when cleaning truck mixer drums.
- Wear appropriate protective equipment to avoid silica exposure when removing concrete residues from inside truck mixer drums.
- Do not enter confined space more than five feet deep without a full body harness and lifeline attached to a man-rated winch for retrieval.
- Lock and tag "OUT OF SERVICE" all impellers, agitators, pumps or any other equipment in the tank before entering the confined space.
- Open all manholes of the space for ventilation.

Vehicles/Driving Safety

FUELING VEHICLES

- Do not smoke while fueling a vehicle.
- Wash hands with soap and water if you spill fuel on your hands.
- Do not leave vehicle while fueling.

DRIVING RULES

- Shut all doors and fasten your seat belt before moving the vehicle.
- Obey all traffic patterns and signs at all times.
- Maintain a three-point contact using both hands and one foot or both feet and one hand when climbing into and out of vehicles.

LIFTING AND PLACING CHUTES

- Position your feet squarely before lifting and carrying a chute.
- Carrying and handling chutes:
    - Place hands with fingers around side edge of chute. Hold chute close to body between your waist and shoulder, or
    - Position hands on chute same as above, only place chute on shoulder with chute hook in front of you.
- Place and connect chutes with fingers well away from lip edges.
- Lock chutes in place when traveling from one position to another on the job.

HANDLING CHUTES

- Avoid pinch points in chute pivots.
- Do not operate the chutes if you have not been trained in the procedure.
- Do not stand in the path of an unfolding chute.

Forklift

- Do not exceed the lift capacity of the forklift. Read the lift capacity plate on the forklift if you are unsure.
- Follow the manufacturer's guidelines concerning changes in the lift capacity before adding an attachment to a forklift.
- Drive with the load at a ground clearance height of 4-6 inches at the tips and 2 inches at the heels in order to clear most uneven surfaces and debris.
- Drive at a walking pace and apply brakes slowly to stop when driving on slippery surfaces such as icy or wet floors.
- Approach railroad tracks at a 45□ angle.
- Do not drive over objects in your pathway.
- Do not drive into an area with a ceiling height that is lower than the height of the mast or overhead guard.
- Steer wide when making turns.
- Do not drive up to anyone standing or working in front of a fixed object such as a wall.
- Do not drive along the edge of an unguarded elevated surface such as a loading dock or staging platform.
- Sound horn when approaching blind corners, doorways or aisles to alert other operators and pedestrians.
- Do not exceed a safe working speed of five miles per hour and slow down in congested areas.
- Drive in reverse and use a signal person when your vision is blocked by the load.
- Look in the direction that you are driving; proceed when you have a clear path.
- Do not use bare forks as a man-lift platform.
- Do not drive the forklift while people are on the attached man-lift platform.
- Do not use "Reverse" to brake.
- Lower the mast completely, turn off the engine and set the parking brake before leaving your forklift.

Welding Safety

- Do not attempt to perform any welding until you have been trained and certified by your supervisor.
- Obey all warning and precaution signs that are posted designating welding areas.
- When arc welding and arc cutting, use helmets or handshields with filter lenses and cover plates to view the arc.
- When operating resistance welding or brazing equipment, use face shields or goggles.
- Wear welding gloves when welding or cutting.
- Open windows, doors and turn on local exhaust fans to reduce air contaminants.
- Use respiratory protective equipment provided by supervisor.
- Do not transfer gases from one cylinder to another or mix gases in a cylinder.
- Do not use oxygen from a cylinder or cylinder manifold unless a pressure regulating device intended for use with oxygen is provided.
- Check all cylinders and equipment (hoses, regulators etc.) for leaks before and after use. Do not use if leaking.
- Use flash guard shields to isolate welding area.
- When not in use, turn off gas supply and bleed off cylinders.
- Place oxygen and fuel gas cylinders and acetylene generators away from the welding position so that they will not be unduly heated by radiation from heated materials, by sparks or slag, or by misdirection of the torch flame.
- Keep one or more approved Class B or Class C fire extinguishers at the location where welding or cutting is being performed.
- When welding, wear a welding helmet with filter plates and lenses, welding gloves, a long sleeve shirt, long pants, and an apron.
- Do not perform welding tasks while wearing wet cotton gloves or wet leather gloves.
- Do not use welding apparatus if power plug cord is cut, frayed, split or otherwise visibly damaged.

Cutting/Brazing

- Obey all signs posted in the welding area.
- Do not leave oily rags, paper or other combustible materials in the welding, cutting or brazing area.
- Use the red hose for gas fuel and the green hose for oxygen.
- Do not use worn or cracked hoses.
- Do not use oil, grease or other lubricants on the regulator.
- "Blow Out" hoses before attaching the torch.
- Ignite torches with friction lighters only. Do not use a cigarette lighter or match.
- Do not wear contact lenses when cutting/brazing in a contaminated atmosphere.
- Bleed oxygen and fuel lines at the end of the workshift.

Compressed Gas Cylinders

Storage and Handling

- Do not handle oxygen cylinders if your gloves are greasy or oily.
- Store all cylinders in the upright position.
- Keep all cylinders not in use capped and secured with safety chain.
- Do not lift cylinders by the valve protection cap.
- Do not store compressed gas cylinders in areas where they can come in contact with chemicals labeled "Corrosive."
- Place cylinders on a cradle, slingboard, pallet or cylinder basket to hoist them.

- Do not place cylinders against electrical panels or live electrical cords where the cylinder can become part of the circuit.
- Do not store oxygen cylinders near fuel gas cylinders such as propane or acetylene, or near combustible material such as oil or grease.
- Do not transport cylinders without first removing regulators and replacing the valve protection caps.
- Do not hoist or transport cylinders by means of magnets or choker slings.

Use of Cylinders

- Do not use dented, cracked or other visually damaged cylinders.
- Use only an open ended or adjustable wrench when connecting or disconnecting regulators and fittings.
- Close the cylinder valve when work is finished, when the cylinder is empty, or at any time the cylinder is moved.
- Stand to the side of the regulator when opening the valve.
- If a cylinder is leaking around a valve or a fuse plug, move it to an outside area away from where work is performed and tag it to indicate the defect.
- Do not use compressed gas to clean the work area, equipment or yourself.
- Do not remove the valve wrench from acetylene cylinders while the cylinder is in use.
- Open compressed gas cylinder valves slowly. Open fully when in use to eliminate possible leakage around the cylinder valve stem.
- Purge oxygen valves, regulators and lines before use.

First Aid Instructions

WOUNDS

Minor: Cuts, lacerations, abrasions, or punctures

- Wash the wound using soap and water; rinse it well.
- Cover the wound using clean dressing.

Major: Large, deep and bleeding

- Stop the bleeding by pressing directly on the wound, using a bandage or cloth.
- Keep pressure on the wound until medical help arrives.

BROKEN BONES

- Do not move the victim unless it is necessary.
- If the victim must be moved, "splint" the injured area. Use a board, cardboard, or rolled newspaper as a splint.

BURNS

Thermal (Heat)

- Rinse the burned area, without scrubbing it, and immerse it in cold water; do not use ice water.
- Blot dry the area and cover it using sterile gauze or a clean cloth.

Chemical

- Flush the exposed area with cool water immediately for 15 to 20 minutes.

EYE INJURY

Small particles

- Do not rub your eyes.
- Use the corner of a soft clean cloth to draw particles out or hold the eyelids open and flush the eyes continuously with water.

Large or stuck particles

- If a particle is stuck in the eye, do not attempt to remove it.
- Cover both eyes with bandage.

Chemical

- Immediately irrigate the eyes and under the eyelids, with water, for 30 minutes.

NECK AND SPINE INJURY

- If the victim appears to have injured his or her neck or spine or is unable to move his or her arm or leg, do not attempt to move the victim unless it is necessary.

HEAT EXHAUSTION

- Loosen the victim's tight clothing.
- Give the victim "sips" of cool water.
- Make the victim lie down in a cooler place with the feet raised.

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