

Subcontractor Safety Manual

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POLICY STATEMENT ON SAFETY

This company is very interested in working with you to provide a safe place in which to work. The prevention of accidents and injuries to all personnel on site is the prime objective.

All personnel are expected to take an active and constant interest in the prevention of accidents. We call upon everyone to use good common sense and in all their actions. We cannot overemphasize that everyone must do their part to minimize accidents.

Please show your support by demonstrating the following:

- 1. OBSERVING COMPANY SAFETY RULES.
- 2. KEEPING WORK AREAS FREE OF UNSAFE CONDITIONS.
- 3. AVOIDING AND ELIMINATING UNSAFE ACTS.
- 4. PROMPTLY REPORTING UNSAFE ACTS AND CONDITIONS.
- 5. REPORTING ALL ACCIDENTS IMMEDIATELY.

Accidents cause suffering and pain. We value each of you as individuals and hope you will cooperate with us in this important endeavor.

Any constructive criticism or suggestions toward improving safety on any of our jobs will be given prompt and careful consideration.

COMMUNICATION

This section establishes procedures designed to develop and maintain employee involvement and interest in the Safety Manual. These activities will also ensure effective communication between management and employees on safety related issues that is of prime importance to the company. The following are some of the safety communication methods that may be used:

- 1. Weekly safety meetings with employees that encourage participation and open, two-way communication.
- 2. Subcontractor safety orientation with Ryzec PM or Superintendent.
- 3. Provision and maintenance of employee bulletin boards discussing safety issues, accidents, and general safety suggestions.

All personnel will be kept advised of highlights and changes relating to the safety procedures. Management shall relay changes and improvements regarding the safety procedures, as appropriate.

Everyone is encouraged to bring any safety concerns they may have to the attention of management. The company will not discriminate against any employee for raising safety issues or concerns.

VIOLATIONS

Disciplinary Action:

The failure of an employee to adhere to safety policies and procedures can have a serious impact on everyone concerned. An unsafe act can threaten not only the health and wellbeing of the employee committing the unsafe act but can also affect the safety of his/her coworkers and customers. Accordingly, any personnel who violates any of the company's safety policies will be subject to disciplinary action.

Violations of safety rules and the Code of Safe Practices are to be considered equal to violations of other company policy. Discipline for safety violations will be administered in a manner that is consistent with the company's system of progressive discipline. If, after training, violations occur, disciplinary action will be taken as follows:

Oral warning. Document it, including date and facts on the "Safety Contact Report" form. Add any pertinent witness statements. Restate the policy and correct practice(s).

Written warning with suspension.

Termination

As in all disciplinary actions, each situation is to be carefully evaluated and investigated. The particular step taken in the disciplinary process will depend on the severity of the violation, employee history, and regard to safety. Managers and supervisors should consult with the office if there is any question about whether or not disciplinary action is justified. Employees may be terminated immediately for willful or extremely serious violations. Union or contract employees are entitled to the grievance process specified by their contract.

Note: You must be consistent in the enforcement of all safety rules.

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CODE OF SAFE PRACTICES

GENERAL RULES

All Employees

Ergonomics and Video Display Terminals

- 1. Take periodic rest breaks from repetitive or prolonged activities by standing up and stretching.
- 2. Use a chair that is padded, is stable, mobile, swivels, and allows operator movement.
- 3. Sit straight up in your chair, and when needed use a footrest that has an adjustable height and is large enough to allow operator movement.
- 4. Adjust your computer screen and keyboard so that they are directly in front of you. Use a table large enough to hold keyboard, the display screen and all necessary documents.
- 5. Place the keyboard low enough so that the operator is not required to reach up or out to the keys.
- 6. Keep wrists and hands in a straight position while key stroking by keeping forearms parallel to the floor and elbows at your sides.

Housekeeping

- 1. Do not place materials such as boxes or trash in walkways and passageways.
- 2. Sweep up shavings from around equipment such as drill presses, lathes, or planers by using a broom and a dustpan.
- 3. Mop up water around drinking fountains and drink dispensing machines immediately.
- 4. Do not store or leave items on stairways.
- 5. Do not block or obstruct stairwells, exits, or accesses to safety and emergency equipment such as fire extinguishers or fire alarms.
- 6. Do not block the walking surfaces of elevated working platforms with tools or materials that are not being used.
- 7. Straighten or remove rugs and mats that do not lie flat on the floor.
- 8. Remove protruding nails or bend them down into the lumber by using a claw hammer.
- 9. Return tools to their storage places after using them.
- 10. Use caution signs or cones to barricade slippery areas such as freshly mopped floors.

Ladders and Step Ladders

- 1. Read and follow the manufacturer's instruction label affixed to the ladder and only use the ladder for the purpose for which it was designed.
- 2. All ladders used by company employees must meet OSHA/ANSI specifications.
- 3. Ladders must be inspected at applicable intervals.
- 4. Load limits for the ladders must not be exceeded.
- 5. Do not use ladders that have loose rungs, cracked, or split side rails, missing rubber footpads, or are otherwise visibly damaged. Any defective ladder should be tagged and/or removed from service.
- 6. Keep ladder rungs clean and free of grease. Remove buildup of material such as dirt or mud.

- 7. Do not place ladders in a passageway or doorway without posting warning signs or cones that detour pedestrian traffic away from the ladder. Lock the doorway that you are blocking with the ladder and post signs that will detour traffic away from your work.
- 8. A ladder that does not support itself must be placed on an angel that is safe which is about one-quarter of the working length of the ladder or a 4:1 ratio.
- 9. Do not place a ladder at a blind corner or doorway without diverting foot traffic by blocking or roping off the area.
- 10. Allow only one person on the ladder at a time.
- 11. Face the ladder when climbing up or down it.
- 12. Maintain a three-point contact by keeping both hands and one foot or both feet and one hand on the ladder at all times when climbing up or down the ladder.
- 13. When performing work from a ladder, face the ladder and do not lean backward or sideways from the ladder.
- 14. Do not stand on tables, chairs, boxes or other improvised climbing devices to reach high places. Use the ladder or stepstool.
- 15. Do not stand on the top two rungs of any ladder.
- 16. Do not stand on a ladder that wobbles, or that leans to the left or right of center.
- 17. When using a straight or extension ladder, extend the top of the ladder at least 3 feet above the edge of the landing.
- 18. Secure the ladder in place by having another employee hold it if it cannot be tied to the structure.
- 19. Do not move a rolling ladder while someone is on it.
- 20. Do not carry items in your hands while climbing up or down a ladder.
- 21. Do not try to "walk" a ladder by rocking it. Climb down the ladder, and then move it.
- 22. Do not use a ladder as a horizontal platform.

Lifting Procedures

- 1. Plan the move before lifting; ensure that you have an unobstructed pathway.
- 2. Test the weight of the load before lifting by pushing the load along its resting surface.
- 3. 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.
- 4. If assistance is required to perform a lift, coordinate and communicate your movements with those of your co-worker.
- 5. Position your feet 6 to 12 inches apart with one foot slightly in front of the other.
- 6. Face the load.
- 7. Bend at the knees, not at the back.
- 8. Keep your back straight.
- 9. Get a firm grip on the object using your hands and fingers. Use handles when they are present.
- 10. Hold the object as close to your body as possible.
- 11. While keeping the weight of the load in your legs, stand to an erect position.
- 12. Perform lifting movements smoothly and gradually; do not jerk the load.
- 13. 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.

- 14. Set down objects in the same manner as you picked them up, except in reverse.
- 15. 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.
- 16. Never lift anything if your hands are greasy or wet.
- 17. Wear protective gloves when lifting objects that have sharp corners or jagged edges.

OFFICE SAFETY

General Rules

- 1. Do not stand on furniture to reach high places.
- 2. Do not kick objects out of your pathway; pick them up or push them out of the way.
- 3. Do not jump from ladders or step stools.
- 4. Do not block your view by carrying large or bulky items; use the dolly or hand truck or get assistance from a fellow employee.
- 5. Do not throw matches, cigarettes or other smoking materials into trash baskets.
- 6. Do not tilt the chair you are sitting in. Keep all chair legs on the floor.
- 7. Use the ladder or step stool to retrieve or store items that are located above your head.

Doors

- 1. Keep doors in hallways fully open or fully closed.
- 2. Use the handle when closing doors.

Files

- 1. Open only one file cabinet drawer at a time. Close the filing cabinet drawer you are working in before opening another filing drawer in the same cabinet.
- 2. Put heavy files in the bottom drawers of file cabinets.
- 3. Use the handle when closing drawers and files.

Sharp Objects

- 1. Store sharp objects, such as pens, pencils, letter openers or scissors in drawers or with the tips pointing down in a container.
- 2. Carry pencils, scissors, and other sharp objects with the tips pointing down.

Paper Cutter/Shredder

- 1. Position hands and fingers on the handle of the paper cutter before pressing down on the blade.
- 2. Keep the paper cutter handle in the closed or locked position when it is not being used.
- 3. Do not use paper-cutting devices if the finger guard is missing.
- 4. Do not place your fingers in or near the feed of a paper shredder.

Staplers

- 1. Point the ejector slot away from yourself and bystanders when refilling staplers.
- 2. Keep fingers away from the ejector slot when loading or testing stapling devices.
- 3. Use a staple remover, not your fingers, for removing staples.

Electrical

- 1. Do not use frayed, cut, or cracked electrical cords.
- 2. Do not plug multiple electrical cords into a single outlet.
- 3. Do not use extension or power cords that have the ground prong removed or broken off.
- 4. Use a cord cover or tape the cord down when running electrical cords across aisles, between desks or across entrances or exits.
- 5. Turn the power switch to "Off" and unplug office machines before adjusting, lubricating or cleaning them.

Fans

- 1. Do not use fans that have excessive vibration or missing guards.
- 2. Do not place floor type fans in walkways, aisles, or doorways.

Stairs

- 1. Use the handrails when ascending or descending stairs or ramps.
- 2. Do not run on stairs or take more than one-step at a time.

Phone Use

- 1. Sit up straight in your chair.
- 2. Keep your feet on floor.
- 3. If the chair height is too high, use a book or other object as a footrest.
- 4. If you use a traditional handset, do not hold the receiver by bending your neck to trap the receiver between your head and shoulder. Hold the receiver with your hand.
- 5. Use your headset for extended phone use.
- 6. For additional lower back support, place a pillow or bundled clothing in the chair at the small of your back.

Carts

- 1. Do not exceed the rated load capacity noted on the manufacturer's label on the cart.
- 2. Ask a spotter to help guide carts around corners and through narrow aisles.
- 3. Do not stand on a cart or float or use it as a work platform.

Hand Truck Operations

- 1. When loading hand trucks, keep your feet clear of the wheels.
- 2. Do not exceed the manufacturer's load rated capacity. Read the capacity plate on the hand truck if you are unsure.
- 3. Place the load so that it will not slip, shift, or fall. Use the straps, if they are provided, to secure the load.
- 4. For extremely bulky or pressurized items such as gas cylinders, strap or chain the items to the hand truck.
- 5. Tip the load slightly forward so that the tongue of the hand truck goes under the load.
- 6. Push the tongue of the hand truck all the way under the load that is to be moved.
- 7. Keep the center of gravity of the load as low as possible by placing heavier objects below the lighter objects.

- 8. Push the load so that the weight will be carried by the axle and not the handles.
- 9. If your view is obstructed, ask a spotter to assist in guiding the load.
- 10. Do not walk backward with the hand truck, unless going up stairs or ramps.
- 11. When going down an incline, keep the hand truck in front of you so that it can be controlled at all times.
- 12. Move hand trucks at a walking pace.
- 13. Store hand trucks with the tongue under a pallet, shelf, or table.

Hazardous Materials

- 1. Follow the instructions on the label and in the corresponding Material Safety Data Sheet (MSDS) for each chemical product you will be using in your workplace.
- 2. Use personal protective clothing or equipment such as goggles, face shield, neoprene gloves, rubber boots, shoe covers, and rubber aprons, when using chemicals labeled "Flammable", "Corrosive", and "Caustic" or "Poisonous".
- 3. Do not use protective clothing or equipment that has split seams, pinholes, cuts, tears, or other visible signs of damage.
- 4. Do not use chemicals from unlabeled containers or unmarked cylinders.
- 5. Do not drag containers labeled "Flammable."
- 6. Do not store chemical containers labeled "Oxidizer" with containers labeled "Corrosive" or "Caustic".

Storeroom/Stockroom:

- 1. Use long handled snips when cutting strapping bands away from a shipping container.
- 2. Wear your safety glasses when cutting strapping bands, uncrating materials, and driving nails.
- 3. Stand to the side of the strapping band when cutting it. Use extreme care when removing bands from pipe on round stock loads. Chock or block loads before removing band to prevent a load shift.
- 4. Do not use pallets or skids that are cracked or split or have other visible damage.
- 5. Stack heavy or bulky storage containers on middle and lower shelves of the storage rack.
- 6. Do not run on stairs or take more than one-step of a staircase at a time.
- 7. Do not jump from elevated places such as truck beds, platforms, or ladders.
- 8. Do not lift slippery or wet objects; use a hand truck.
- 9. Follow the safe handling instructions listed on the label of the container or listed on the corresponding Material Safety Data Sheet when handling each chemical stored in the stockroom.
- 10. Do not handle or load any containers of chemicals if their containers are cracked or leaking.

CARPENTRY

Electrical Powered Tools

- 1. Do not use power equipment or tools on which you have not been trained.
- 2. All hand or power tools must be maintained in a safe condition and any defective hand or power tools must be removed from service.

- 3. Keep power cords away from the path of drills, saws, vacuum cleaners, floor polishers, mowers, slicers, knives, grinders, irons, and presses.
- 4. Safety guards must never be removed when a tool is being used.
- 5. Proper PPE must be used when handling tools.
- 6. Do not carry plugged-in equipment or tools with your finger on the switch.
- 7. Do not carry equipment or tools by the cord.
- 8. Disconnect the tool from the outlet by pulling on the plug, not the cord.
- 9. Turn the tool off before plugging or unplugging it.
- 10. Do not leave tools that are "On" unattended.
- 11. Do not handle or operate electrical tools when your hands are wet or when you are standing on wet floors.
- 12. Do not operate spark inducing tools such as grinders, drills, or saws near containers labeled "Flammable" or in an explosive atmosphere such as a paint spray booth.
- 13. Turn off electrical tools and disconnect the power source from the outlet before attempting repairs or service work. Tag the tool "Out of Service."
- 14. Do not connect multiple electrical tools into a single outlet.
- 15. Do not run extension cords through doorways, through holes in ceilings, walls, or floors.
- 16. Do not drive over, drag, step on or place objects on a cord.
- 17. Do not operate a power hand tool or portable appliance with a two-pronged adapter or a two-conductor extension cord.
- 18. Do not use a power hand tool while wearing wet cotton gloves or wet leather gloves.
- 19. Never operate electrical equipment barefooted. Wear rubber-soled or insulated work boots.
- 20. Do not operate a power hand tool or portable appliance while holding a part of the metal casing or holding the extension cord in your hand. Hold all portable power tools by the plastic handgrips or other nonconductive areas designed for gripping purposes.
- 21. Do not operate a power hand tool or portable appliance that has a frayed, worn, cut, improperly spliced, or damaged power cord.
- 22. Do not operate a power hand tool or portable appliance if the ground pin from the threepronged power plug is missing or has been removed.

Garage Doors

- 1. Do not use undersized rods or other improvised tools to wind garage door springs.
- 2. Engage garage door lock in the "locked" position before winding the springs.
- 3. Do not attempt to adjust winding cones or bars when the garage door is in the full open position.

Hand Tools

- 1. Use tied-off containers to keep tools from falling off scaffolds and other elevated work platforms.
- 2. Keep the blades of all cutting tools sharp.
- 3. Carry all sharp tools in sheaths or holsters.
- 4. Tag worn, damaged, or defective tools "Out of Service" and do not use them.
- 5. Do not use a tool if its handle has splinters, burrs, cracks, splits or if the head of the tool is loose.

- 6. Do not use impact tools such as hammers, chisels, punches, or steel stakes that have mushroomed heads.
- 7. When handing a tool to another person, direct sharp points and cutting edges away from yourself and the other person.
- 8. Do not chop at heights above your head when working with a hand axe.
- 9. Do not carry sharp or pointed hand tools such as screwdrivers, scribes, aviation snips, scrapers, chisels or files in your pocket unless the tool or pocket is sheathed.
- 10. Do not perform "make-shift" repairs to tools.
- 11. Do not use "cheaters" on load binders or "boomers."
- 12. Do not carry tools in your hand when climbing. Carry tools in tool belts or hoist the tools to the work area with a hand line.
- 13. Do not throw tools from one location to another, from one employee to another, from scaffolds or other elevated platforms.
- 14. Chisels
- 15. Keep the cutting edge of the chisel sharp.
- 16. Do not use chisels with damaged striking ferrules.
- 17. Hold a chisel with a tool holder if possible.
- 18. Clamp a small work piece in a vise and chip towards the stationary jaw when working with a chisel.

Clamps

- 1. Do not use the C-clamp for hoisting materials.
- 2. Do not use the C-clamp as a permanent fastening device.

Files/Rasps

- 1. Do not use a file as a pry bar, hammer, screwdriver, or chisel.
- 2. When using a file or a rasp, grasp the handle in one hand and the toe of the file in the other.
- 3. Do not hammer on a file.

Hammers

- 1. Use a claw hammer for pulling nails and driving nails.
- 2. Do not strike nails or other objects with the cheek of the hammer.
- 3. Do not strike a hardened steel surface, such as a cold chisel, with a claw hammer.
- 4. Do not strike one hammer against another hammer.
- 5. Do not use a hammer if your hands are oily, greasy, or wet.
- 6. Do not use a hammer as a wedge, a pry bar or for pulling large spikes.
- 7. Use only a sledge-type hammer on a striking face wrench.

Knives/Sharp Instruments

- 1. When handling knife blades and other cutting tools, direct sharp points and edges away from you.
- 2. Store knives in knife blocks or in sheaths after use.
- 3. Do not use knives with dull blades.

- 4. Do not use honing steels that do not have disc guards.
- 5. Do not attempt to catch a falling knife.
- 6. Use knives for the operation for which they are named.
- 7. Do not use knives with broken or loose handles.
- 8. Do not use knives as screwdrivers, pry bars, can openers or ice picks.
- 9. Do not pick up knives by their blades.
- 10. Carry knives with their tips pointed towards the floor.

Pliers

- 1. Do not attempt to force pliers by using a hammer on them.
- 2. Do not slip a pipe over the handles of pliers to increase leverage.
- 3. Use pliers with insulated handles for electrical work.
- 4. Do not use pliers that are cracked, broken, or sprung.
- 5. When using diagonal cutting pliers, shield the loose pieces of cut material from flying into the air by using a cloth or your gloved hand.

Saws

- 1. Do not use an adjustable blade saw such as a hacksaw, coping saw, keyhole saw, or bow saw, if the blade is not taut.
- 2. Do not use a saw that has dull saw blades.
- 3. Keep hands and fingers away from the saw blade while using the saw.
- 4. Do not carry a saw by the blade.
- 5. When using a handsaw, hold the work piece firmly against the worktable.
- 6. Do not use woodworking equipment such as circular saws, radial saws, or jointers if they do not have guards on the saw blade.
- 7. Keep control of saws by decreasing downward pressure at the end of the stroke.
- 8. When operating scroll saws, stop the machine before removing scrap pieces from the table.
- 9. Clamp work when using a hole saw.

Screwdrivers

- 1. Always match the size and type of screwdriver blade to fit the head of the screw.
- 2. Do not hold the work piece against your body while using a screwdriver.
- 3. Do not put your fingers near the blade of the screwdriver when tightening a screw.
- 4. Use an awl, drill or a nail to make a starting hole for screws.
- 5. Do not force a screwdriver by using a hammer or pliers on it.
- 6. Do not use a screwdriver as a punch, chisel, pry bar or nail puller.
- 7. Use a screwdriver that has an insulated handle for electrical work.
- 8. Do not use a screwdriver if your hands are wet, oily, or greasy.
- 9. Do not use a screwdriver to test the charge of a battery.
- 10. When using a spiral ratchet screwdriver, push down firmly and slowly.

Snips

- 1. Wear safety glasses or safety goggles when using snips to cut materials.
- 2. Wear work gloves when cutting materials with snips.
- 3. Do not use straight cut snips to cut curves.

- 4. Keep the blade aligned by tightening the nut and bolt on the snips.
- 5. Do not use snips as a hammer, screwdriver, or pry bar.
- 6. Use the locking clip on the snips after use.

Vises

- 1. When clamping a long work piece in a vise, support the far end of the work piece by using an adjustable pipe stand, sawhorse, or box.
- 2. Position the work piece in the vise so that the entire face of the jaw supports the work piece.
- 3. Do not use a vise that has worn or broken jaw inserts, or has cracks or fractures in the body of the vise.
- 4. Do not slip a pipe over the handle of a vise to gain extra leverage.

HAZARDOUS MATERIALS

- 1. Follow the instructions on the label and in the corresponding Material Safety Data Sheet (MSDS) for each chemical product used in your workplace.
- 2. Do not use chemicals from unlabeled containers and unmarked cylinders.

HOUSEKEEPING

- 1. Do not place material such as boxes or trash in walkways and passageways.
- 2. Sweep up shavings from around equipment such as drill presses, lathes, or planers by using a broom and a dustpan.
- 3. Do not block or obstruct stairwells, exits or accesses to safety and emergency equipment such as fire extinguishers or fire alarms.
- 4. Keep walking surfaces of elevated working platforms, such as scaffolds, clear of tools and materials that are not being used.
- 5. Remove protruding nails or bend them down into the lumber by using a claw hammer.
- 6. Return tools to their storage places after use.
- 7. Do not use gasoline for cleaning purposes.

LADDERS AND STEP LADDERS

- 1. Read and follow the manufacturer's instructions label affixed to the ladder if you are unsure how to use the ladder.
- 2. Do not use ladders that have loose rungs, cracked or split side rails, missing rubber footpads, or are otherwise visibly damaged.
- 3. Keep ladder rungs clean and free of grease. Remove material buildup such as dirt or mud.
- 4. Do not use a metal ladder on rooftops or within 50 feet of electrical power lines.
- 5. Allow only one person on the ladder at a time.
- 6. Face the ladder when climbing up or down.
- 7. Maintain a three-point contact by keeping both hands and one foot or both feet and one hand on the ladder at all times when climbing up or down.
- 8. When performing work from a ladder, face the ladder and do not lean backward or sideways from the ladder.
- 9. Do not stand on the top two rungs of any ladder.

- 10. Do not stand on a ladder that wobbles, or that leans to the left or right.
- 11. When using a straight ladder, extend the top of the ladder at least 3 feet above the edge of the landing.
- 12. Do not move a rolling ladder while someone is on it.
- 13. Do not place ladders on barrels, boxes, loose bricks, pails, concrete blocks, or other unstable bases.
- 14. Do not carry items in your hands while climbing up or down a ladder.
- 15. Do not try to "walk" a ladder by rocking it. Climb down the ladder, and then move it.
- 16. Do not use a ladder as a horizontal platform.

LIFTING PROCEDURES

- 1. Plan the move before lifting; remove obstructions from your chosen pathway.
- 2. Test the weight of the load before lifting by pushing the load along its resting surface.
- 3. 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.
- 4. If assistance is required to perform a lift, coordinate and communicate your movements with those of your co-worker.
- 5. Position your feet 6 to 12 inches apart with one foot slightly in front of the other.
- 6. Face the load.
- 7. Bend at the knees, not at the back.
- 8. Keep your back straight.
- 9. Get a firm grip on the object with your hands and fingers. Use handles when present.
- 10. Never lift anything if your hands are greasy or wet.
- 11. Wear protective gloves when lifting objects with sharp corners or jagged edges.
- 12. Hold objects as close to your body as possible.
- 13. Perform lifting movements smoothly and gradually; do not jerk the load.
- 14. 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.
- 15. Set down objects in the same manner as you picked them up, except in reverse.
- 16. 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.
- 17. Slide materials to the end of the tailgate before attempting to lift them off of a pick-up truck. Do not lift over the walls or tailgate of the truck bed.

PERSONAL PROTECTIVE EQUIPMENT

- 1. Do not paint or drill holes in hard hats.
- 2. Do not wear hard hats that are dented or cracked.
- 3. Wear safety glasses, goggles, or face shield when using chippers, grinders, lathes, or sanders.
- 4. Wear earplugs or earmuffs in areas posted "Hearing Protection Required."

PNEUMATIC TOOLS

- 1. Do not point a compressed air hose at bystanders or use it to clean your clothing.
- 2. Do not use tools that have handles with burrs or cracks.

- 3. Do not use compressors if their belt guards are missing. Replace belt guards before use.
- 4. Turn the tool "off" and let it come to a complete stop before leaving it unattended.
- 5. Disconnect the tool from the airline before making any adjustments or repairs to the tool.
- 6. Engage positive locks on hoses and attachments before use.
- 7. Shut off pressure valve and disconnect airline when not in use.
- 8. Tag damaged or defective pneumatic tools "Out of Service" to prevent usage of the tool by other employees.

POWDER ACTUATED TOOLS

- 1. Only employer-authorized personnel, with a valid certification card may operate powderactuated tools.
- 2. Wear safety glasses, goggles, or face shields when operating powder actuated tools.
- 3. Wear earplugs or earmuffs when making fastenings.
- 4. Do not permit bystanders in the area when using a powder-actuated tool.
- 5. Do not load tool until ready to make a fastening.
- 6. Keep tool pointed in a safe direction (away from personnel).
- 7. Post a sign alerting co-workers that a powder actuated tool is being used.
- 8. After use, lock powder actuated tools and powder loads in a container and store in a safe place such as a locker or the trunk of a car.

SCAFFOLDING

- 1. Follow the manufacturer's instructions when erecting the scaffold.
- 2. Do not work on scaffolds outside during stormy or windy weather.
- 3. Do not climb on scaffolds that wobble or lean to one side.
- 4. Initially inspect scaffold prior to mounting. Do not use a scaffold if any pulley, block, hook, or fitting is visibly worn, cracked, rusted, or otherwise damaged. Do not use a scaffold if any rope is frayed, torn, or visibly damaged.
- 5. Do not use any scaffold tagged "Out of Service."
- 6. Do not use unstable objects such as barrels, boxes, loose brick or concrete blocks to support scaffolds or planks.
- 7. Do not use a scaffold unless guardrails and all flooring are in place.
- 8. Level the scaffold after each move. Do not extend adjusting leg screws more than 12 inches.
- 9. Do not walk or work beneath a scaffold unless a wire mesh has been installed between the mid-rail and the toe board or planking.
- 10. Use safety belts and lanyards when working from scaffolds that are higher than 10 feet and that do not have top and mid-guard rails.
- 11. Do not climb the cross braces for access to the scaffold. Use a ladder.
- 12. Do not jump from, to, or between scaffolding.
- 13. Do not slide down cables, ropes or guys used for bracing.
- 14. Keep both feet on the decking. Do not sit or climb on the guardrails.
- 15. Do not lean out from the scaffold. Do not rock the scaffold.
- 16. Keep the scaffold free of scraps, loose tools, tangled lines and other obstructions.
- 17. Do not throw anything "overboard" unless a spotter is available. Use debris chutes or lower things by hoist or by hand.

- 18. Do not move a mobile scaffold with anyone on the scaffold.
- 19. Lock and chock wheels on rolling scaffolds before using.

STAIRWAYS, FLOORS AND OPENINGS

- 1. Do not work on open sided floors, elevated walkways or elevated platforms if there are no guardrails in place.
- 2. Stand clear of floor openings if guardrails or covers are removed or displaced.

HEAVY EQUIPMENT OPERATORS

Site Safety

- 1. Do not start work until barricades, barrier logs, fill or other protection have been installed to isolate the work area from local traffic.
- 2. Do not work outdoors during lightning storms.
- 3. Drink plenty of clear liquids during your breaks.
- 4. Take breaks in shaded areas.

HEAVY EQUIPMENT SAFETY

General

- 1. No passengers are permitted on heavy equipment.
- 2. Keep windows and windshield clean.
- 3. Do not use heavy equipment if its horn or backup alarm does not sound.
- 4. Turn off the engine before leaving heavy equipment unattended.
- 5. Do not jump off of or onto any heavy equipment.
- 6. Keep heavy equipment in gear when going down grade. Do not use neutral.
- 7. Display the "Slow Moving Vehicle" sign when operating heavy equipment on roads.
- 8. Do not operate backhoes, power shovels and other heavy equipment within two (2) feet from the edge of an excavation.
- 9. Backhoe/Power Shovel Operations
- 10. Do not use a bucket or other attachments for a staging or temporary platform for workers.
- 11. Do not operate backhoe over or across underground utilities that are marked by paint, flagged, or staked.
- 12. Set swing brake of the bucket arm when moving the vehicle to and from the digging site.
- 13. Stay in the compartment during operation of the backhoe or power shovel. Do not reach in or attempt to operate controls from outside the backhoe or power shovel.

Forklifts Pre-Use Inspection

- 1. Do not use forklift if any of the following conditions exist:
- 2. The mast has broken or cracked weld-points.
- 3. The roller tracks are not greased or the chains are not free to travel.
- 4. Forks are unequally spaced or cracks exist along the blade or at the heels.
- 5. Hydraulic fluid levels are low.
- 6. Hydraulic line and fitting have excessive wear or are crimped.
- 7. Fluid is leaking from the lift or the tilt cylinders.
- 8. The hardware on the cylinders is loose.

- 9. Tires are excessively worn, split, or have missing tire material.
- 10. Air filled tires are not filled to the operating pressure indicated on the tire.
- 11. Batteries have cracks or holes, uncapped cells, frayed cables, broken cable insulation, loose connections, or clogged vent caps.

Starting the Forklift

1. Apply the foot brake and shift gears to neutral before turning the key.

Picking Up a Load

- 2. Square up on the center of the load and approach it straight on with the forks in the travel position.
- 3. Stop when the tips of your forks are about a foot from the load.
- 4. Level the forks and slowly drive forward until the load is resting against the backrest of the mast.
- 5. Lift the load high enough to clear whatever is under it.
- 6. Back up about one foot, and then slowly and evenly tilt the mast backwards to stabilize the load.

Putting a Load Down

- 1. Square up and stop about one foot from desired location.
- 2. Level the forks and drive to the loading spot.
- 3. Slowly lower the load to the floor.
- 4. Tilt the forks slightly forward so that you do not hook the load.
- 5. When the path behind you is clear of obstructions, back straight out until the forks have cleared the pallet.

Stacking One Load on Top of Another

- 1. Stop about one foot away from the loading area and lift the mast high enough to clear the top of the stack.
- 2. Slowly move forward until the load is squarely over the top of the stack.
- 3. Level the forks and lower the mast until the load is no longer supported by the forks.
- 4. Look over both shoulders for obstructions and back straight out if the path is clear.

Forklift Safety Rules

- 1. Do not exceed the lift capacity of the forklift. Read the lift capacity plate on the forklift if you are unsure.
- 2. Follow the manufacturer's guidelines concerning changes in the lift capacity before adding attachments, such as wedges, to a forklift.
- 3. Lift the load an inch or two to test for stability: If the rear wheels are not in firm contact with the floor, take a lighter load or use a forklift with a higher lift capacity.
- 4. Do not raise or lower a load while you are en-route. Wait until you are in the loading area and have stopped before raising or lowering the load.
- 5. After picking up a load, adjust the forks so that the load is tilted slightly backward for added stability.

- 6. Drive with the load at a ground clearance height of 4-6 inches at the tips and inches at the heels in order to clear most uneven surfaces and debris.
- 7. Drive at a walking pace and apply brakes slowly to stop when driving on slippery surfaces such as icy or wet floors.
- 8. Approach angle railroad tracks at a 45
- 9. Do not drive over objects in your pathway.
- 10. Do not drive into an area with a ceiling height that is lower than the height of the mast or overhead guard.
- 11. Steer wide when making turns.
- 12. Do not drive up to anyone standing or working in front of a fixed object such as a wall.
- 13. Do not drive along the edge of an unguarded elevated surface such as a loading dock or staging platform.
- 14. Obey all traffic rules and signs.
- 15. Sound horn when approaching blind corners, doorways, or aisles to alert other operators and pedestrians.
- 16. Do not exceed a safe working speed of five miles per hour. Slowdown in congested areas.
- 17. Stay a minimum distance of three truck lengths from other operating mobile equipment.
- 18. Drive in reverse and use a signal person when your vision is blocked by the load.
- 19. Look in the direction that you are driving; proceed when you have a clear path.
- 20. Do not use bare forks as a man-lift platform.
- 21. Do not drive the forklift while people are on the attached man-lift platform.
- 22. Drive loaded forklifts forward up ramps.
- 23. Raise the forks an additional two inches to avoid hitting or scraping the ramp surface as you approach the ramp.
- 24. Drive loaded forklifts in reverse when driving down a ramp.
- 25. Drive unloaded forklifts in reverse going up a ramp and forward going down a ramp.
- 26. Do not attempt to turn around on a ramp.
- 27. Do not use "Reverse" to brake.
- 28. Lower the mast completely, turn off the engine, and set the parking brake before leaving your forklift.

HEAVY EQUIPMENT OPERATORS

Personal Protective Equipment

- 1. Wear hard hats, hearing protection and safety goggles while operating heavy equipment.
- 2. Do not wear hard hats that are dented or cracked.
- 3. Do not continue to work if your safety glasses become fogged. Stop work and clean the glasses until the lenses are clear and defogged.

General Hand Tool Safety

- 1. Keep the blade of all cutting tools sharp.
- 2. Do not use a tool if its handle has splinters, burrs, cracks, splits or if the head of the tool is loose.
- 3. Tag worn, damaged, or defective tools "Out of Service" and do not use them.
- 4. Do not use impact tools such as hammers or chisels that have mushroomed heads.

- 5. When handing a tool to another person, direct sharp points, and cutting edges away from yourself and the other person.
- 6. When using knives, shears or other cutting tools, cut in a direction away from your body.
- 7. Carry all sharp tools in a sheath or holster.
- 8. Do not perform "make-shift" repairs to tools.
- 9. Do not use "cheaters" on load binders or "boomers."
- 10. Do not carry tools in your hand when climbing. Carry tools in tool belts or hoist the tools to the work area using a hand line.
- 11. Do not throw tools from one location to another or from one employee to another.

Pneumatic Tools

- 1. Do not point a charged compressed air hose at bystanders or use it to clean your clothing.
- 2. Lock and/or tag tools "Out of Service" to prevent usage of the tool.
- 3. Do not use tools that have handles with burrs or cracks.
- 4. Do not use compressors if their belt guards are missing. Replace belt guards before using the compressor.
- 5. Turn the power switch of the tool to "Off" and let it come to a complete stop before leaving it unattended.
- 6. Disconnect the tool from the airline before making any adjustments or repairs to the tool.

Lifting Equipment

- 1. Do not use chain slings if links are cracked, twisted, stretched, or bent.
- 2. Do not shorten slings by using makeshift devices such as knots or bolts.
- 3. Do not use a kinked chain.
- 4. Protect slings from the sharp edges of their loads by placing pads over the sharp edges of the items that have been loaded.
- 5. Wear work gloves when handling rough, sharp-edged, or abrasive chains, cables, ropes, or slings.
- 6. Do not alter or remove the safety latch on hooks. Do not use a hook that does not have a safety latch, or if the safety latch is bent.

When Lifting

- 1. Do not place your hands between the sling and its load when the sling is being tightened around the load.
- 2. Lift the load from the center of hooks, not from the point.

GENERAL LABOR PERSONNEL

Site Safety

- 1. Do not start work until barricades, barrier logs, fill or other protection have been installed to isolate the work area from local traffic.
- 2. Reflective warning vests must be worn by traffic flagmen who are assigned to controlling traffic.
- 3. Do not approach any heavy equipment until the operator has seen you and has signaled to you that it is safe to approach.

- 4. Walk around or step over holes, rocks, roots, materials or equipment in your pathway.
- 5. Do not work outdoors during lightning storms.
- 6. Drink plenty of clear liquids during your breaks.
- 7. Take breaks in shaded areas.

Knives/Sharp Instruments

- 1. Use knives for the operation for which they are made.
- 2. Do not use knives that have broken or loose handles.
- 3. Do not use knives as screwdrivers, pry bars, can openers or ice picks.
- 4. When handling knife blades and other cutting tools, direct sharp points and edges away from you.
- 5. Cut in the direction away from your body when using knives.

HAND TOOL SAFETY

- 1. Keep the blade of all cutting tools sharp.
- 2. Do not carry sharp or pointed hand tools such as screwdrivers, scribes, chisels or files in your pocket unless the tool or pocket is sheathed.
- 3. Tag worn, damaged, or defective tools "Out of Service" and do not use them.
- 4. Do not use a tool if its handle has splinters, burrs, cracks, splits or if the head of the tool is loose.
- 5. Do not use impact tools such as hammers, steel stakes, or chisels that have mushroomed heads.
- 6. Do not perform "make-shift" repairs to tools.
- 7. Do not throw tools from one location to another or from one employee to another.
- 8. Transport hand tools only in toolboxes or tool belts. Do not carry tools in your clothing.

Hammers

- 1. Do not use a hammer if your hands are oily, greasy, or wet.
- 2. Do not strike objects with the cheek of the hammer.
- 3. Do not strike one hammer against another hammer.

Pliers

- 1. Do not attempt to force pliers by using a hammer on them.
- 2. Do not use pliers that are cracked, broken, or sprung.

Saws

- 1. Keep control of saws by releasing downward pressure at the end of the stroke.
- 2. Do not use a saw that has dull saw blades.
- 3. Oil saw blades after each use.
- 4. Keep hands and fingers away from the saw blade while you are using the saw.
- 5. Do not carry a saw by the blade.
- 6. When using a handsaw, hold the work piece firmly against the worktable.

Electrical Powered Tools

- 1. Do not use power equipment or tools on which you have not been trained.
- 2. Keep power cords away from path of power saws.
- 3. Do not use cords that have splices, exposed wires, or cracked or frayed ends.
- 4. Do not carry plugged in equipment or tools with your finger on the switch.
- 5. Do not carry equipment or tools by the cord.
- 6. Turn the tool off before plugging or unplugging it.
- 7. Do not leave tools that are "On" unattended.
- 8. Do not handle or operate electrical tools when your hands are wet or when you are standing on wet floors or wet ground.
- 9. Do not use extension cords or other grounded three pronged power cords that have the ground prong removed or broken off.
- 10. Do not use an adapter that eliminates the ground such as a cheater plug.
- 11. 1Do not drive over, drag, step on or place objects on a cord.

General Power Saw Safety

- 1. Wear the prescribed personal protective equipment such as goggles, gloves, dust masks, and hearing protection when operating the power saw.
- 2. Do not use a power saw that has cracked, broken, or loose guards or other visible damage.
- 3. Turn off the saw before making measurements, adjustments, or repairs.
- 4. Keep your hands away from the exposed blade.
- 5. Operate the saw at full cutting speed with a sharp blade to prevent kickbacks.
- 6. If the saw becomes jammed, turn the power switch of the saw to "OFF" before pulling out the incomplete cut.
- 7. Do not alter the anti-kickback device or blade guard.
- 8. When using the power saw, do not reach across the cutting operation.
- 9. When using the power saw, do not hold the work piece against your body when making the cut.

Pneumatic Tools/Compressed Air

- 1. Do not point a compressed air hose at bystanders or use it to clean your clothing.
- 2. Do not use pneumatic tools that have handles with burrs or cracks.
- 3. Lock and/or tag tools "Out of Service" to prevent usage of the tool.
- 4. Do not use compressors if their belt guards are missing. Replace the belt guards before using the compressor.
- 5. Turn the power switch of the tool to "Off" and let it come to a complete stop before leaving it unattended.
- 6. Disconnect the tool from the airline before making any adjustments or repairs to the tool.

LATHERS

- 1. Lifting Safety (Bags, Cans, Buckets)
- 2. Position your feet 6 to 12 inches apart with one foot slightly in front of the other.
- 3. Face the load.
- 4. Bend at the knees, not at the back.
- 5. Keep your back straight.

- 6. Get a firm grip on the object with your hands and fingers. Use handles when present.
- 7. Perform lifting movements smoothly and gradually; do not jerk the load.
- 8. Hold objects as close to your body as possible.
- 9. 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.
- 10. Set down objects in the same manner as you picked them up, except in reverse.
- 11. 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.

Sandblasting

- 1. Only authorized personnel may use blasting equipment.
- 2. Wear your eye protection, respirator, and protective clothing when blasting.
- 3. Visually inspect hoses or fittings on blasting equipment for wear and tear prior to use. Do not use if the hose or fitting is cracked or otherwise damaged.
- 4. Post area, "Unauthorized personnel keep out".
- 5. When working outdoors, keep shirts on to avoid bruises, dehydration, and sunburn.

Restoration Job and Asbestos is Suspected

- 1. Do not perform asbestos removal operations, unless you have been trained, qualified, and certified in asbestos removal procedures.
- 2. Use the respirator that has been fit tested and assigned to you by your supervisor.
- 3. Always assume that materials used prior to 1976, such as plaster and blown insulation contain asbestos.
- 4. Do not use sanders or power devices that may create dust or airborne particles.
- 5. Do not dry scrape, bead blast or mechanically pulverize any existing plaster or blown insulation.

Fiberglass Batts or Sprayed-on Insulation

- 1. Do not take work clothes home when exposed to sprayed-on insulation or fiberglass batts.
- 2. Change your work clothes before leaving the job site.
- 3. Place work clothes contaminated with fiberglass or sprayed-on insulation in a closed labeled container approved by your employer.
- 4. Use your respirator when working with sprayed-on insulation or fiberglass.

Respiratory Protection

- 1. Shave daily to prevent facial hair from interfering with the face seal of the respirator.
- 2. Clean and return respirators to their carrying cases or cartons and store them in your locker or in a designated storage area as instructed by your employer when the work is completed.
- 3. Only use the respirator that has been fitted and issued to you.

Infection Control

1. Wash your hands after removing your gloves with soap or mild detergent

- 2. and water before eating, smoking, using the toilet, or any areas of the body that may have contacted cementitious mixtures, pastes or spray-on insulation at the end of each workday.
- 3. Use a mechanic's cream hand cleaner such as "Go-Jo" or "Humus" where water is not readily available.

FINISHING PERSONNEL-(tapping, bedding, sanding)

Hazardous Materials

Mixing Cementitious Components

- 1. Apply Vaseline to exposed skin surfaces on your arms and hands prior to handling plaster, lime or any cementitious mixtures.
- 2. Do not handle lime or cementitious mixtures if you have open cuts or scratches on exposed skin surfaces such as your arms or hands.
- 3. Use personal protective clothing or equipment such as canvas gloves and protective eyewear, to avoid cement poison or burns.
- 4. Open doors, windows, and turn the power switch of the local exhaust fans to "On" when working indoors.

Applying Exterior Finishes (scratch coats, coquina, stucco installations, etc.)

- 1. Do not use a metal ladder on rooftops or within 50 feet of electrical power lines.
- 2. Do not block the walking surfaces of elevated working platforms, such as scaffolds, with tools or materials that are not being used.
- 3. When working outdoors, drink plenty of fluids and keep shirts on to avoid dehydration and sunburn.

Using Joint Compounds

- 1. Wear protective gloves when handling compounds or chemicals from containers labeled "Flammable," "Toxic," "Caustic" or "Poisonous" and wash your hands after removing the gloves.
- 2. Follow the instructions on the label and in the corresponding Material Safety Data Sheet (MSDS) for each joint compound or chemical product used in your workplace.
- 3. 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.
- 4. Do not use joint/filler compounds or chemicals from unlabeled containers.
- 5. Do not store chemical containers labeled "Oxidizer" with containers labeled "Corrosive" or "Caustic."
- 6. Always use goggles and gloves when handling joint/filler compounds or chemicals labeled "Corrosive" or "Caustic."
- 7. Applying Finishes: Plaster, Coquina, Popcorn, or other
- 8. Do not smoke or eat while performing stucco or "popcorn" finishes.
- 9. Stand clear of mixing or blowing operations.
- 10. Do not stand, work, or operate pneumatic equipment such as blowers with hoses within three feet of any unprotected roof opening or within five feet of any unprotected roof edge.

Job Site Safety

- 1. Do not walk on or under partially demolished walls or floors.
- 2. Stop working outdoors and seek shelter during lightning storms.
- 3. Walk around or duck under protruding framing or ductwork and limbs.
- 4. Do not walk on fallen trees; walk on the ground.
- 5. Keep combustible liquids stored and covered in approved containers.

Personal Protective Equipment

- 1. Wear your safety glasses when mixing plaster ingredients and additives, applying spackling, finishing ceilings, or sanding.
- 2. Wear dust mask or respirator when emptying sacks of dry material such as additives for fireproofing or plaster ingredients.
- 3. Use lifelines, safety harnesses, or lanyards when you are working higher than 6 feet off the ground.
- 4. Wear safety glasses while plastering, applying mud, or sanding.
- 5. Wear safety goggles when using power tools or when applying a finishing material.

Manual Stacking and Handling Material

- 1. Store all wallboard flat.
- 2. Do not store boards vertically; this practice will damage the edges creating unstable stacks.
- 3. Stand each board vertically on its side as close to the edge of the pile as possible, tilt the board toward the stack, and let the board drop freely on top of the stack.
- 4. Do not allow boards to overhang more than an inch. Align flush all boards, to keep the boards from becoming unstable and topple on someone while restacking.
- 5. Use a co-worker to assist handling the boards when stocking. Coordinate and communicate your movements with those of your co-worker.

Stacking Material (Sheet rock, gypsum, foam boards, etc.)

- 1. When stacking panels by hand, position the panels sideways slightly in front of you, so you do not have to reach over your head or twist your body to lift these materials.
- 2. Position panels to lean flat against a wall and do not wobble or slide.
- 3. Push and slide panels along their edge or get assistance from a co-worker.

PAINTING PERSONNEL

Painting Safety

- 1. Store rags that have oil or paint on them in closed metal containers labeled "oily rags".
- 2. Press the pressure relief value on painting canisters and painting guns prior to disconnecting them.
- 3. Do not store food or eat where spray painting is being performed.
- 4. Close the lids of containers of paint and thinner tightly after each use or when not being used.

Blasting Safety

1. Only blasters may use blasting equipment.

- 2. Visually inspect hoses or fittings on blasting equipment for wear and tear prior to use. Do not use if the hose or fitting is cracked or otherwise damaged.
- 3. Do not use compressed air to clean equipment or yourself.

Spray Painting Safety

- 1. Do not point the spray gun toward any part of your body or at anyone else.
- 2. Store rags that have paint on them in closed metal containers labeled "oily rags."
- 3. Press the pressure relief valve on painting canisters and painting guns prior to disconnecting them.
- 4. Do not store food or eat where spray painting is being performed.
- 5. Close the lids of containers of paint and thinner tightly after each use or when not being used.
- 6. Return containers of thinners, mineral spirits and other liquids labeled "Flammable" to the storage cabinet labeled "Flammable Storage," when painting is finished.
- 7. Always wash your hands with soap and water after using paints or other toxic solvents to remove paint from your skin.

PLUMBERS (MASTERS and APPRENTICES)

General Installation Rules & Guidelines

- 1. Do not begin working until barricades, warning signs or other protective devices have been installed to isolate the work area from local traffic.
- 2. Do not walk under partially demolished walls or floors.
- 3. Stop working outdoors and seek shelter during lightning storms.
- 4. When working outside, keep shirts on to avoid dehydration and sunburn.
- 5. Drink plenty of clear liquids during your breaks.
- 6. If you discover a wasp nest or bee hive while installing or servicing equipment, use the long distance aerosol insecticide labeled "Wasp and Bee Insecticide" to spray the nest. Test with the stick or pole once again to ensure that all bees/wasps are gone before continuing work.
- 7. Seek first aid immediately if bitten or stung by wasps or bees. Follow First Aid Procedures.
- 8. Do not handle caterpillars or other insects with your bare hands.
- 9. Do not use a metal ladder within 50 feet of electrical power lines.
- 10. Do not block the walking surfaces of elevated working platforms, such as scaffolds, with tools or materials that are not being used.
- 11. Do not stand on sinks, toilets, or cabinets; use a stepladder.
- 12. Do not work on open sided floors, elevated walkways, or elevated platforms if there are no guardrails in place.
- 13. Do not handle hot items such as hot water heaters or water/steam lines with your bare hands; use cloth gloves.
- 14. Open the gate valve to release the pressure from the steam lines and turn off the boiler before servicing piping equipment.

Work Clothing and Personal Protective Equipment

1. Wear the face shield over your goggles or safety glasses during open furnace, welding, soldering or gas cutting operations.

- 2. Do not continue to work if your safety glasses become fogged. Stop work and clean the glasses until the lenses are clear and defogged.
- 3. Wear the welding helmet or welding goggles during welding operations.
- 4. Wear the dielectric gloves when working on electric current.
- 5. Wear your earplugs or earmuffs in areas posted "Hearing Protection Required."
- 6. Safety goggles must be worn while welding or cutting metal.
- 7. Do not wear long sleeve shirts that do not have button-down cuffs.
- 8. Do not wear jewelry or coats with metal zippers to work.

Confined Space Entry (sewers, etc.)

- 1. Do not enter the sewers or other confined spaces without reading and following this "confined space entry procedure."
- 2. Obtain a confined space entry permit from your supervisor before entering the confined space.
- 3. Do not enter the confined space unless an assigned observer or lookout person posted at the entrance. If you are assigned as the outside observer, do not go inside the confined space under any circumstances and keep the entrant in your view at all times.
- 4. Place furnaces and space heaters in a level position on the downhill lower side of the manhole.
- 5. Do not throw materials into or out of manholes. Place materials in a receptacle and hoist them in and out by means of a rope.
- 6. Do not leave tools and/or materials on the ground around a manhole opening.
- 7. Use survey equipment such as an "organic vapor meter" to test and monitor the confined space for oxygen deficiency and explosive or hazardous gases\fumes. If the organic vapor meter reading for the explosive gases is above 10% of the LEL and if the oxygen reading is below 19.5% or greater that 3.5%, do not enter the confined space.
- 8. Turn "off" disconnect, or lock and tag all systems that affect or make operational the confined space prior to entry.
- 9. Do not perform hot work such as electric or gas welding or cutting in or on a confined space until the atmosphere has been determined to be safe.
- 10. Use mechanical forced air ventilation when open flames or torches are used in a confined space.

FABRICATION OPERATIONS

General Machine Safety

- 1. Replace the guards before starting machines, or after making adjustments or repairs to the machine.
- 2. Do not remove, alter, or bypass any safety guards or devices when operating any piece of equipment or machinery.
- 3. Do not wear loose clothing or jewelry around moving machinery.
- 4. Long hair must be contained under a hat or hair net, regardless of gender.
- 5. Read and obey safety warnings posted on or near any machinery.
- 6. Do not try to stop a work piece as it goes through any machine. If the machine becomes jammed, unplug it before clearing the jam.

- 7. Do not use metal working equipment such as grinders, sanders, or beveling machines if they do not have safety guards.
- 8. Clamp work when using saws or cutting tools.

ROOFING PERSONNEL

Housekeeping

- 1. Do not place materials such as tools, boxes, buckets, or trash in walkways and passageways.
- 2. Do not kick objects out of your pathway; pick them up or push them out of the way.
- 3. Do not throw matches, cigarettes or other smoking materials into trash bins.
- 4. Do not store or leave items on stairways.
- 5. Do not block or obstruct stairwells, exits, or accesses to safety and emergency equipment such as fire extinguishers or fire alarms.
- 6. Do not leave loose tools, lunch boxes or other items on rooftop. Return tools to their storage places after use.
- 7. Keep walking surfaces of elevated working platforms, such as scaffolds and equipment access pads on roofs, clear of tools and materials that are not being used.
- 8. Remove protruding nails or bend them down into the lumber by using a claw hammer.
- 9. Do not use gasoline for cleaning purposes.
- 10. Sweep up scraps and debris from around equipment such as drill presses, punches, or power shears by using a broom and a dustpan.
- 11. Do not drop debris through roof top openings unless the area below has been barricaded at least 6 feet out from all edges of the opening.
- 12. Do not use gasoline for cleaning purposes.

Lifting Procedures

General

- 1. Plan the move before lifting; remove obstructions from your chosen pathway.
- 2. Test the weight of the load before lifting by pushing the load along its resting surface.
- 3. 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.
- 4. If assistance is required to perform a lift, coordinate and communicate your movements with those of your co-worker.
- 5. Never lift anything if your hands are greasy or wet.
- 6. Wear protective gloves approved by your supervisor when lifting objects with sharp corners or jagged edges.
- 7. 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.

When Lifting

- 1. Position your feet 6 to 12 inches apart with one foot slightly in front of the other.
- 2. Face the load.
- 3. Bend at the knees, not at the back.
- 4. Keep your back straight.
- 5. Get a firm grip on the object with your hands and fingers. Use handles when present.

- 6. Perform lifting movements smoothly and gradually; do not jerk the load.
- 7. Hold objects as close to your body as possible.
- 8. 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.
- 9. Set down objects in the same manner as you picked them up, except in reverse.
- 10. Slide materials to the end of the tailgate before attempting to lift them off a pick-up
- 11. truck. Do not lift over the walls or tailgate of the truck bed.

Ladder and Step Ladder Safety

- 1. Do not use ladders that have loose rungs, cracked or split side rails, missing rubber footpads or are otherwise visibly damaged.
- 2. Keep ladder rungs clean of grease. Remove buildup of material such as dirt, debris, or mud.
- 3. When performing work from a ladder, face the ladder and do not lean backward or sideways from the ladder.
- 4. Do not stand on the top two rungs of any ladder.
- 5. Do not stand on a ladder that wobbles or that leans to the left or right.
- 6. Do not try to "walk" a ladder by rocking it. Climb down the ladder, and then move it.
- 7. One person shall be on the ladder at a time.
- 8. Do not use a ladder as a horizontal platform.
- 9. Secure the ladder in place by having another employee hold it.
- 10. Face the ladder when climbing up or down.
- 11. Maintain a three-point contact by keeping both hands and one foot or both feet and one hand on the ladder at all times when climbing up or down.
- 12. Do not carry items in your hands while climbing up or down a ladder.
- 13. Read and follow the manufacturer's instructions label affixed to the ladder if you are unsure how to use the ladder.
- 14. Do not use a metal ladder on rooftops or within 50 feet of electrical power lines.
- 15. Do not jump from rooftops, chimneystacks, or ladders.
- 16. Do not use scrap lumber, bundles of shingles, or any other types of makeshift stacks or bundles of building materials as improvised climbing devices.

Personal Protective Equipment

- 1. Do not drill holes in or paint your hard hat.
- 2. Do not wear hard hats that are dented or cracked.
- 3. Wear the chemical goggles when using, applying, or handling chemical liquids or powders from containers labeled "Caustic" or "Corrosive."
- 4. Do not continue to work if your safety glasses become fogged. Stop work and clean the glasses until the lenses are clear and defogged.
- 5. Wear your earplugs or earmuffs in areas posted "Hearing Protection Required."
- 6. When handling hot tar, wear clothing made of cotton or non-synthetic fibers. Wear long sleeve shirts, long pants, and gloves.
- 7. Use lifelines, safety harnesses, or lanyards when you are working higher than 6 feet off the ground.
- 8. Wear safety goggles while reaming, drilling, welding or cutting metal.

- 9. Wear leatherwork gloves when handling rough, sharp-edged, or abrasive material such as chains, cables ropes, or slings. Wear snug fitting gloves with cuffs that will extend up under the buttoned shirtsleeves.
- 10. Wear laced high-top work boots at all times except when working on roofs steeper than 4:12 or when applying special roofing materials that require other types of shoes.
- 11. Wear your hard hats at all times when someone is working above you.
- 12. Wear safety goggles when tearing off roofs, when using power tools or when installing coal tar pitch roofing material.
- 13. Use face cream when working with coal tar pitch.
- 14. Do not take work clothes home when exposed to coal tar pitch volatiles.
- 15. Change your work clothes before leaving the job site.
- 16. Place work clothes contaminated with coal tar pitch volatiles in a closed labeled container approved by your employer.

When Respirators are Provided

- 1. Shave daily to prevent facial hair from interfering with the face seal of the respirator.
- 2. Do not wear contact lenses when wearing a respirator.
- 3. Clean and return respirators to their carrying cases or cartons and store them in your locker or in a designated storage area as instructed by your employer when the work is completed.
- 4. Only use the respirator that has been fitted and issued to you.
- 5. Use your respirator when working with coal tar pitch.

Infection Control

- 1. Wash your hands after removing your gloves with soap or mild detergent and water before eating, smoking, using the toilet, or any areas of the body that may have contacted these volatiles at the end of each workday.
- 2. Use a mechanic's cream hand cleaner such as "Go-Jo" or "Humus" where water is not readily available.

Scaffolding

- 1. Follow the manufacturer's instructions when erecting the scaffold.
- 2. Do not work on scaffolds outside during stormy or windy weather.
- 3. Do not climb on scaffolds that wobble or lean to one side.
- 4. Initially inspect the scaffold prior to mounting it. Do not use a scaffold if any pulley, block, hook, or fitting is visibly worn, cracked, rusted, or otherwise damaged. Do not use a scaffold if any rope is frayed, torn, or visibly damaged.
- 5. Do not use any scaffold tagged "Out of Service."
- 6. Do not use unstable objects such as bundles of shingles, steel drums or cans, crates, loose brick or concrete blocks to support scaffolds or planks.
- 7. Do not work on platforms or scaffolds unless they are fully planked.
- 8. Do not use a scaffold unless guardrails and all flooring are in place.
- 9. Do not use strips of felt or any building material as a makeshift guardrail. Utilize guardrail system as outlined per manufacturers' instructions.

- 10. Level the scaffold after each move. Do not extend adjusting leg screws more than 12 inches.
- 11. Do not walk or work beneath a scaffold unless a wire mesh has been installed between the mid-rail and the toe board or planking.
- 12. Use your safety belts and lanyards when working on scaffolding at a height of 10 feet or more above ground level. Attach the lanyard to a secure member of the scaffold.
- 13. Do not climb the cross braces for access to the scaffold. Use the ladder.
- 14. Do not jump from, to or between scaffolding.
- 15. Do not slide down cables, ropes or guys used for bracing.
- 16. Keep both feet on the decking. Do not sit or climb on the guardrails.
- 17. Do not lean out from the scaffold. Do not rock the scaffold.
- 18. Keep the scaffold free of roofing material scraps, loose tools, and other obstructions.
- 19. Do not throw anything "overboard" unless a spotter is available. Use the debris chutes or lower things by hoist or by hand.
- 20. Do not move a mobile scaffold if anyone is on the scaffold.
- 21. Prior to using a rolling scaffold, chock the wheels with wheel blocks and lock them by using your foot to depress the wheel lock.

Lifting Equipment (chains, cables, ropes, slings, etc.)

- 1. Do not use chain slings if links are cracked, twisted, stretched, or bent.
- 2. Fabricate all wire in wire rope slings by using thimbles; do not form eyes by using wire clips or knots.
- 3. Do not shorten slings by using makeshift devices such as knots or bolts.
- 4. Do not use a kinked chain.
- 5. Protect slings from the sharp edges of their loads by placing pads over the sharp edges of the items that have been loaded.
- 6. Do not place your hands between the sling and its load when the sling is being tightened around the load.
- 7. Wear work gloves when handling rough, sharp-edged, or abrasive material such as chains, cables, ropes, or slings.
- 8. Do not alter or remove the safety latch on hooks. Don't use a hook that does not have a safety latch or if the safety latch is bent.
- 9. Lift the load from the center of the hooks, not from the point.
- 10. Do not use a ground-operated hoist in which the safety latch on the hook has been removed, is bent, or is otherwise visibly damaged.

FORKLIFT SAFETY

General

- 1. Only authorized and trained personnel are allowed to operate the forklifts.
- 2. Apply the foot brake and shift gears to neutral before turning the key.
- 3. Do not use bare forks as a man-lift platform.
- 4. Steer the forklift wide when making turns.
- 5. Sound the forklift horn when approaching blind corners, doorways, or aisles to alert other operators and pedestrians.

Lifting

- 1. Do not exceed the lift capacity of the forklift. Read the lift capacity plate on the forklift if you are unsure.
- 2. Follow the manufacturer's guidelines concerning changes in the lift capacity before adding an attachment to a forklift.
- 3. Lift the load an inch or two to test for stability; if the rear wheels are not in firm contact with the floor, take a lighter load or use a forklift that has a higher lift capacity.
- 4. Do not raise or lower a load while you are enroot. Wait until you are in the loading area and have stopped before raising or lowering the load.
- 5. After picking up a load, adjust the forks so that the load is tilted slightly backward for added stability.
- 6. Raise the forks an additional two inches to avoid hitting or scraping the ramp surface as you approach the ramp.
- 7. Do not drive the forklift while people are on the attached man-lift platform.
- 8. Drive unloaded forklifts in reverse when going up a ramp and forward when going down a ramp.
- 9. Drive a loaded forklift in a forward gear when going up a ramp. Upon approaching the ramp, raise the forks an additional two inches to avoid hitting or scraping the ramp surface.
- 10. Do not attempt to turn the forklift around on a ramp.
- 11. Do not use a gear for the opposite direction of travel as a means to slow down or stop the forklift.
- 12. Lower the mast completely, turn the engine off, and set the parking brake before leaving your forklift.

Cranes and Hoists

- 1. Do not use load hooks or chains that are cracked, bent, elongated, or broken.
- 2. Do not use cranes that do not have their rated load capacity indicated on each side of the crane or on its load block.
- 3. Passengers are not permitted to ride inside the operator's cab of a truck crane.
- 4. Keep crane windows clean. Do not use a crane if its windows are broken.
- 5. Do not exceed posted weight limits on hoists.
- 6. Do not operate a crane on soft ground without cribbing and mats.
- 7. Fully extend outriggers before attempting a lift.
- 8. Stay outside the barricades of the posted swing radius.
- 9. Do not perform any crane retrofits or modifications without the manufacturer's approval.
- 10. Do not leave the crane unattended with a hoisted load.
- 11. Do not hoist loads over people.
- 12. Do not drive on the road shoulders.
- 13. Wear high visibility vests.
- 14. Wear the prescribed personal protective equipment such as hardhat, goggles, gloves, dust masks, and hearing protection when operating a hoist.
- 15. Replace the belts, gears or rotating shaft guards after servicing a crane; do not use the crane if guards are missing from these areas.

Specific Operations

Picking up a Load

- 1. Square up on the center of the load and approach it straight on with the forks in the travel position.
- 2. Stop when the tips of your forks are about a foot from the load.
- 3. Level the forks and slowly drive forward until the load is resting against the backrest of the mast.
- 4. Lift the load high enough to clear whatever is under it.
- 5. Back up about one foot, and then slowly and evenly tilt the mast backwards to stabilize the load.

Putting a Load Down

- 1. Square up and stop about one foot from the desired location.
- 2. Level the forks and drive to the loading spot.
- 3. Slowly lower the load to the floor.
- 4. Tilt the forks slightly forward so that you do not hook the load.
- 5. When the path behind you is clear of obstructions, back straight out until the forks have cleared the pallet.

Stacking One Load on Top of Another

- 1. Stop about one foot away from the loading area and lift the mast high enough to clear the top of the stack.
- 2. Slowly move forward until the load is squarely over the top of the stack.
- 3. Level the forks and lower the mast until the forks no longer support the load.
- 4. Look over both shoulders for obstructions and back straight out if the path is clear.

Job Site Safety

- 1. Do not walk under partially demolished walls or floors.
- 2. Stop working outdoors and seek shelter during lightning storms.
- 3. Do not begin working until barricades, warning signs or other protective devices have been installed to isolate the work area.
- 4. Do not throw or toss debris outside barricaded areas.
- 5. Walk around or step over holes, rocks, and roots in your pathway.
- 6. Stay clear of all trucks, forklifts, cranes, and other heavy equipment when in operation.
- 7. Do not approach any heavy equipment until the operator has seen you and has signaled to you that it is safe to approach.
- 8. Walk around or duck under protruding branches and limbs.
- 9. Do not walk on fallen trees; walk on the ground.
- 10. Do not clear brush by hand within 100 ft. of heavy equipment operations.
- 11. Keep combustible liquids stored and covered in approved containers.

VEHICULAR SAFETY (TRUCKS AND ALL-TERRAIN VEHICLES)

General

- 1. Drive on the graded roadways that have been leveled for this purpose.
- 2. Turn on low-beam headlights when driving on the site.

- 3. Drive up the slope or down the slope, not across the slope.
- 4. Hold onto vehicle when stepping out of it onto loose ground, holes, or rocks.
- 5. Tools and materials shall be secured to prevent movement when transported in the same compartment with employees.
- 6. Do not exceed the maximum number of people for which the vehicle is designed to transport.
- 7. Do not operate a loaded vehicle or load it, by means of cranes, power shovels, loaders, or similar equipment, if the vehicle does not have a cab shield and/or canopy to protect you from shifting or falling materials.
- 8. Do not carry extra fuel on any vehicle except in a properly mounted fuel tank approved by your employer.

Fueling Vehicles

- 1. Turn the vehicle off before fueling.
- 2. Do not smoke while fueling a vehicle.
- 3. Wash hands with soap and water if you spill gasoline on them.

Driving Rules

- 1. Shut all doors and fasten your seat belt before moving the vehicle.
- 2. Obey all traffic patterns and signs at all times.
- 3. Maintain a three point contact using both hands and one foot or both feet and one hand when climbing into and out of vehicles.
- 4. Drive up the slope or down the slope not across the slope.

Trailer Safety

- 1. Set the parking brake in the towing vehicle and use wheel blocks to chock the wheels of the trailer before removing the kettle from the trailer.
- 2. Permit no one to ride in the trailer.
- 3. Use ramps to load and unload kettles and equipment from the trailer.
- 4. Take slow, wide turns when towing trailers.
- 5. Do not exceed the load capacity as posted on the trailer door of the trailer.
- 6. Do not place all the heavy equipment on one side of the trailer.
- 7. Secure equipment and fuel tanks to the vehicle with chains or straps to eliminate or minimize shifting of the load.
- 8. Do not mount or dismount equipment on the traffic side.

HAND/POWER TOOL SAFETY

General

- 1. Use tied off containers to keep tools from falling off scaffolds and other elevated work platforms.
- 2. Carry all sharp tools in a sheath or holster.
- 3. Tag worn, damaged, or defective tools "Out of Service" and do not use them.
- 4. Do not use a tool if its handle has splinters, burrs, cracks, splits or if the head of the tool is loose.

- 5. Do not use impact tools such as hammers, chisels, punches, or steel stakes that have mushroomed heads.
- 6. Do not carry sharp or pointed hand tools such as screwdrivers, scribes, aviation snips, scrapers, chisels or files in your pocket unless the tool or your pocket is sheathed.
- 7. Do not perform "make-shift" repairs to tools.
- 8. Do not use "cheaters" on load binders or "boomers."
- 9. Do not carry tools in your hand when you are climbing. Carry tools in tool belts or hoist the tools to the work area using a hand line.
- 10. Do not throw tools from one location to another, from one employee to another or from scaffolds or other elevated platforms.
- 11. Only transport hand tools in toolboxes or tool belts. Do not carry tools in your clothing.

Hammers

- 1. Use a claw hammer for pulling nails.
- 2. Do not strike nails or other objects with the "cheek" of the hammer.
- 3. Do not strike a hardened steel surface, such as a cold chisel, with a claw hammer.
- 4. Do not strike one hammer against another hammer.
- 5. Do not use a hammer if your hands are oily, greasy, or wet.
- 6. Do not use a hammer as a wedge, a pry bar or for pulling large spikes.

Snips

- 1. Wear safety glasses or safety goggles when using snips to cut materials.
- 2. Wear work gloves when cutting materials with snips.
- 3. Do not use straight cut snips to cut curves.
- 4. Keep the blade aligned by tightening the nut and bolt on the snips.
- 5. Do not use snips as a hammer, screwdriver, or pry bar.
- 6. Engage the locking clip on the snips after use.

Screwdrivers

- 1. Always match the size and type of screwdriver blade to fit the head of the screw.
- 2. Do not hold the work piece against your body while using a screwdriver.
- 3. Do not put your fingers near the blade of the screwdriver when tightening a screw.
- 4. Use an awl, drill or a nail to make a starting hole for screws.
- 5. Do not force a screwdriver by using a hammer or pliers on it.
- 6. Do not use a screwdriver as a punch, chisel, pry bar or nail puller.
- 7. Do not carry a screwdriver in your pocket.
- 8. Do not use a screwdriver if your hands are wet, oily, or greasy.
- 9. When using a spiral ratchet screwdriver, push down firmly and slowly.

Powder Actuated Tools

- 1. Wear impact resistant safety goggles or face shields when operating any powder actuated tools.
- 2. Do not attempt to fasten through a pre-drilled hole unless the powder actuated tool has a hole locator.

- 3. Keep your head and body behind the powder-actuated tool when firing it.
- 4. Before using powder actuated tools do not alter, bypass or remove the shield or guard at the muzzle end of the powder-actuated tool.
- 5. Do not load a powder-actuated tool until you are ready to fire it.

Hydraulic/Pneumatic Tools

- 1. Do not point a compressed air hose at bystanders or use it to clean your clothing.
- 2. Lock and/or tag tools "Out of Service" to prevent usage of the tool.
- 3. Do not use tools that have handles with burrs or cracks.
- 4. Do not use compressors if their belt guards are missing. Replace belt guards before use.
- 5. Turn the tool "off" and let it come to a complete stop before leaving it unattended.
- 6. Disconnect the tool from the airline before making any adjustments or repairs to the tool.

Heat Exhaustion/Sun Exposure

1. Keep shirts on to avoid dehydration and sunburn.

Knives/Sharp Instruments

- 2. When handling knife blades and other cutting tools, direct sharp points and edges away from you.
- 3. Cut in the direction away from your body when using knives.
- 4. Use the knife that has been sharpened; do not use knives that have dull blades.
- 5. Use knives for the operations for which they are made.
- 6. Do not use knives that have broken or loose handles.
- 7. Do not use knives as screwdrivers, pry bars, or can openers.
- 8. Do not pick up knives by their blades.
- 9. Carry knives with their tips pointed towards the ground.
- 10. Do not carry knives, scissors or other sharp tools in your pockets or an apron unless they are first placed in their sheath or holder.
- 11. Do not attempt to catch a falling knife.
- 12. Store knives in knife blocks or in sheaths after using them.

Electrical Safety

- 1. Do not use power equipment or tools on which you have not been trained.
- 2. Keep power cords away from the path of drills, metal shears, power presses, grinders, and other tools or equipment that can splice or cut the power cord.
- 3. Do not use cords that have splices, exposed wires, or cracked or frayed ends.
- 4. Do not carry plugged in equipment or tools with your finger on the switch.
- 5. Do not carry equipment or tools by the cord.
- 6. Disconnect the tool from the outlet by pulling on the plug, not the cord.
- 7. Turn the tool off before plugging or unplugging it.
- 8. Do not leave tools that are "On" unattended.
- 9. Do not handle or operate electrical tools when your hands are wet or when you are standing on wet floors.

- 10. Do not operate spark inducing tools such as grinders, drills, or saws near containers labeled "Flammable" or in an explosive atmosphere such as a paint spray booth.
- 11. Turn off the electrical tool and unplug it from the outlet before attempting repairs or service work. Tag the tool "Out of Service."
- 12. Do not use extension cords or other three pronged power cords that have a missing prong.
- 13. Do not use an adapter such as a cheater plug that eliminates the ground.
- 14. Do not plug multiple electrical cords into a single outlet.
- 15. Do not run extension cords through doorways, through holes in ceilings, walls, or floors.
- 16. Do not stand in water or on wet surfaces when operating power hand tools or portable electrical appliances.
- 17. Do not use a power hand tool to cut wet or water soaked building materials.
- 18. Do not use a power hand tool while wearing wet cotton gloves or wet leather gloves.
- 19. Never operate electrical equipment barefooted. Wear rubber-soled or insulated work boots.
- 20. Do not operate a power hand tool or portable appliance that has a frayed, worn, cut, improperly spliced, or damaged power cord.
- 21. Do not operate a power hand tool or portable appliance if a prong from the three-pronged power plug is missing or has been removed.
- 22. Do not operate a power hand tool or portable appliance that has a two-pronged adapter or a two-conductor extension cord.
- 23. Do not operate a power hand tool or portable appliance while holding a part of the metal casing or while holding the extension cord in your hand. Hold all portable power tools by the plastic handgrips or other nonconductive areas designed for gripping purposes.

HAZARDOUS MATERIALS

When Using Chemicals to Seal Metals

- 1. Wear protective gloves when handling chemicals from containers labeled "Flammable," "Toxic," "Caustic" or "Poisonous" and wash your hands after removing the gloves.
- 2. Follow the instructions on the label and in the corresponding Material Safety Data Sheet (MSDS) for each chemical product used in your workplace.
- 3. 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.
- 4. Do not use chemicals from unlabeled containers and unmarked cylinders.
- 5. Do not perform "hot work" such as welding, metal grinding, or other spark producing operations within 50 feet of containers labeled "Flammable" or "Combustible."
- 6. Do not drag containers labeled "Flammable."
- 7. Do not store chemical containers labeled "Oxidizer" with containers labeled "Corrosive" or "Caustic."
- 8. Always use chemical goggles and a face shield before handling chemicals labeled "Corrosive" or "Caustic."
- 9. Power Hoist Safety
- 10. Use manufacturer approved counter weights to secure the hoist. Do not use roofing materials such as rolls of felt or bundles of shingles,
- 11. Do not exceed the manufacturer's recommended load capacity limits.

- 12. Only trained personnel, approved by the employer, are allowed to operate a power hoist.
- 13. Use the power hoist in an area that permits the operator to stand clear of the load at all times.
- 14. Use safety hooks or shackles to attach the load whenever possible.
- 15. Use 'tag lines' to control the load when necessary.
- 16. Keep your fingers and clothing clear of hoist machinery.
- 17. Do not attempt adjustments while the hoist is running.

Portable Welding Equipment

- 1. Wear a welding helmet or welding goggles during welding operations.
- 2. Do not use personal or employee-owned power tools and portable appliance while at work.
- 3. Do not perform welding tasks while wearing wet cotton gloves or wet leather gloves.
- 4. Insulated work gloves are required for all welders when using welding equipment.
- 5. Do not use welding apparatus if power plug is cut, frayed, split or otherwise visibly damaged or modified.
- 6. When replacing power plugs and cords of welding apparatus, always check to ensure that the ground wire is connected and the power plug prongs are not worn off, allowing the plug to be inserted backward.

COMPRESSED GAS CYLINDERS

Storage and Handling

- 1. Do not handle oxygen cylinders if your gloves are greasy or oily.
- 2. Store all cylinders in the upright position.
- 3. Place valve protection caps on gas cylinders that are in storage or not in use.
- 4. Do not lift cylinders by the valve protection cap.
- 5. Do not store compressed gas cylinders in areas where they can come in contact with chemicals labeled "Corrosive."
- 6. Place cylinders on a cradle, sling board, pallet or cylinder basket to hoist them.
- 7. Do not place cylinders against electrical panels or live electrical cords where the cylinder can become part of the circuit.
- 8. Do not use a flame to check for propane cylinder leak, use a leak or monitor detector.
- 9. Use of Cylinders
- 10. Do not use dented, cracked, or other visually damaged cylinders.
- 11. Use only an open ended or adjustable wrench when connecting or disconnecting regulators and fittings.
- 12. Do not transport cylinders without first removing regulators and replacing the valve protection caps.
- 13. Close the cylinder valve when work is finished, when the cylinder is empty or at any time, the cylinder is moved.
- 14. Do not store oxygen cylinders near fuel gas cylinders such as propane or acetylene or near combustible material such as oil or grease.
- 15. Stand to the side of the regulator when opening the valve.
- 16. 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.
- 17. Do not hoist or transport cylinders by means of magnets or choker slings.
- 18. Do not use compressed gas to clean the work area, equipment, or yourself.
- 19. Do not remove the valve wrench from acetylene cylinders while the cylinder is in use.
- 20. Open compressed gas cylinder valves slowly. Open fully when in use to eliminate possible leakage around the cylinder valve stem.
- 21. Purge oxygen valves, regulators, and lines before use.

Torch on Applications

- 1. "Blow Out" hoses before attaching the torch.
- 2. Inspect hoses and torches before use. Replace damaged, burned, worn, or leaking parts.
- 3. Use a pressure gauge on every regulator. Do not use an adjustable regulator with a higherpressure range than the original regulator that came with the torch.
- 4. Never face the gauge while opening the cylinder valve.
- 5. Before lighting a torch, purge the hose, adjust the working pressures, then use a friction lighter to ignite the gases. Do not use matches or a cigarette lighter.
- 6. Do not use oil, grease or other lubricants on the regulator.
- 7. When shutting off the torch, close the gas cylinder valve first and let the remaining gas burn out of the hose before closing off the torch valve.
- 8. Never overfill a gas cylinder. It could explode.
- 9. Use only hoses listed for liquid petroleum (LP) gas.
- 10. Use soap solution to test for gas leaks before lighting.
- 11. Visually check and ensure that the flow of gas through the regulator is flowing in the proper direction. Directional flow is stamped on the regulator.
- 12. To keep 'frosting' from occurring, increase the size of the bottle or cylinder.
- 13. Secure propane tanks in an upright position and place them at least 10 feet from the open flame.
- 14. Keep non-applicators at least 10 feet from the flame.
- 15. Keep vent in pressure regulator clear at all times.
- 16. When shutting off the torch, close the propane cylinder valve first and let the remaining gas burn out of the hose.
- 17. Do not leave a lighted torch unattended.
- 18. Do not heat a cylinder to increase pressure.
- 19. Place a fire extinguisher near you, but away from the torch and other parts of LP gas equipment, when performing torch on operations.
- 20. Do not lay an operating torch over the edge of a roof.
- 21. Do not use a trowel as a torch stand.
- 22. Do not lay an operating torch to rest on a gas cylinder. If there is a gas leak in the cylinder area, there could be a fire.

Coal Tar/Asphalt Applications

- 1. Do not smoke or eat while performing tar-roofing work.
- 2. Stand clear of hot asphalt when it is being dumped out of the kettle.

3. Do not stand, work, or operate equipment such as felt laying machines or mechanical moppers within three feet of any unprotected roof opening or within five feet of any unprotected roof edge.

Single-Ply Roofing

1. Wear respirators when hot air welding PVC or when performing adhesive welding procedures.

Conveyors

- 2. Do not climb on conveyor equipment.
- 3. Do not ride on any conveyors.
- 4. When using a belt driven conveyor to load a trailer bed, the person inside the trailer shall give verbal commands to the person loading the conveyor.

JOB-SPECIFIC RULES

Roof Felt Slitter

- 1. Replace the guards before starting the machine, after making adjustments and after making repairs to a machine.
- 2. Do not remove, alter, or bypass any safety guard or device when operating the machine.
- 3. Read and obey safety warnings posted on the machine.
- 4. Do not wear loose clothing, jewelry, or neckties when operating machine.
- 5. Long hair must be contained under a hat or hair net, regardless of gender.
- 6. Do not try to stop a work piece as it goes through any machine. If the machine becomes jammed, disconnect the power before clearing the jam.
- 7. Report any missing machine or tool guard immediately to your supervisor.

Vehicle Loading

- 1. Plan the move before loading; ensure that you have an unobstructed pathway and that the vehicle is parked as close to the equipment or material as possible.
- 2. Keep bumpers/tailgates free of grease, water, etc.; remove buildup of material such as dirt, mud, etc.
- 3. Use lifting aids such as dollies, pallet jack, and forklift or get assistance from a co-worker to place dock plate resting between loading dock and truck surface.
- 4. If equipment or material that is to be loaded into truck is too heavy or bulky, use lifting aids such as hand trucks, dollies, pallet jacks and carts, or get assistance from co-workers.
- 5. Secure all equipment and material within the truck to eliminate or reduce movement.

Crane Truck or Boom Conveyor Truck

- 1. Only trained and employer authorized personnel are permitted to operate the crane truck or boom conveyor.
- 2. Park on firm level surface, place the vehicle in neutral, and apply the emergency brake.
- 3. If the truck is equipped with an audible back up warning device, engage the alarm before backing into a location.

- 4. If the truck is equipped with mechanical, hydraulic, or pneumatic jacks, braces or stabilizers engage such, prior to engaging the swing conveyor.
- 5. Do not engage the swing conveyor if there are overhead obstructions in the way. Allow sufficient distance for wind gust that would cause the conveyor to contact power lines.
- 6. Never climb the conveyor to gain access to the roof, use a ladder.
- 7. Do not load supplies onto a roof if there are unguarded openings such as skylights.

KETTLEMEN

General

- 1. Do not leave kettles or tankers unattended while they are being fired.
- 2. Take breaks in shaded areas.
- 3. Do not smoke or eat while performing asphalt work.
- 4. Stand clear of hot asphalt when it is being dumped out of the kettle.
- 5. Do not place a pumper or agitator into kettles or tankers.

Personal Protective Equipment

- 1. Wear face shields when loading and withdrawing hot liquid asphalt from a kettle or tanker.
- 2. Wear your personal protective equipment such as goggles, gloves, and respiratory protection when operating the kettle.
- 3. Do not wear contact lenses when operating the kettle.

Job Site Safety

- 1. Do not walk under partially demolished walls or floors.
- 2. Stop working outdoors and seek shelter during lightning storms.
- 3. Do not begin working until barricades, warning signs or other protective devices have been installed to isolate the work area.
- 4. Do not throw or toss roofing scraps such as shingles, rubber roofing material, or any other debris outside barricaded areas.
- 5. Walk around or step over holes, rocks, and roots in your pathway.
- 6. Stay clear of all trucks, forklifts, cranes, and other heavy equipment when in operation.
- 7. Do not approach any heavy equipment until the operator has seen you and has signaled to you that it is safe to approach.
- 8. Walk around or duck under protruding branches and limbs.
- 9. Do not walk on fallen trees; walk on the ground.
- 10. Do not clear brush by hand within 100 ft. of heavy equipment operations.
- 11. Keep combustible liquids stored and covered in approved containers.

SHOP/SERVICE EMPLOYEES

Lockout/Tag out

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.

- 1. Do not perform any maintenance, inspection, cleaning, adjusting or servicing of any
- 2. equipment without following the employer lockout / tag out program.
- 3. If required to work on powered equipment (hydraulic, electrical, air, etc.), you must have
- 4. your personal padlock with your name on it and personal key on your person at all times.
- 5. Attach your own lock or tag when you need to isolate an energy source.
- 6. Do not remove a lock from any equipment unless you placed it there yourself. Each person shall place his/her own lock/tag when required to isolate an energy source.
- 7. Do not start any adjustment, service or repair without verifying that the tag/lock out
- 8. switch or control cannot be by-passed or over-ridden.
- 9. Disconnect and padlock all machine power disconnects in the off position before removing
- 10. guards for the purpose of working "ON" or "IN" the machinery or its approaching
- 11. un guarded parts. (NOTE: When more than one employee is working on a single piece of equipment, each employee must use his own padlock along with lockout tongs to lock out
- 12. the equipment. When the work is completed, he must remove only his lock.)
- 13. Lockout verification:
- 14. Verify that the locked-out switch or control cannot be overridden.
- 15. Test the equipment to be certain that the locked-out switch is de-energized and not simply malfunctioning.
- 16. Press all start buttons to see if the equipment starts.
- 17. Ensure the system you will be working on is the same one that has been locked out.
- 18. Before restarting the equipment, verify the following:
- 19. All tools and other items have been removed.
- 20. All machine guards are in place.
- 21. All electric systems are reconnected.
- 22. All employees are clear of equipment.
- 23. Before machinery is put back into use after LOCKOUT/TAGOUT, give a verbal
- 24. announcement / sound warning to fellow employees.

Electrical Powered Tools

- 1. Do not use power equipment or tools on which you have not been trained.
- 2. Keep power cords away from the path of drills, saws, vacuum cleaners, floor polishers, mowers, slicers, knives, grinders, irons, and presses.
- 3. Do not carry plugged-in equipment or tools with your finger on the switch.
- 4. Do not carry equipment or tools by the cord.
- 5. Disconnect the tool from the outlet by pulling on the plug, not the cord.
- 6. Turn the tool off before plugging or unplugging it.
- 7. Do not leave tools that are "On" unattended.
- 8. Do not handle or operate electrical tools when your hands are wet or when you are standing on wet floors.
- 9. Do not operate spark inducing tools such as grinders, drills, or saws near containers labeled "Flammable" or in an explosive atmosphere such as a paint spray booth.

- 10. Turn off electrical tools and disconnect the power source from the outlet before attempting repairs or service work. Tag the tool "Out of Service."
- 11. Do not connect multiple electrical tools into a single outlet.
- 12. Do not run extension cords through doorways, through holes in ceilings, walls, or floors.
- 13. Do not drive over, drag, step on or place objects on a cord.
- 14. Do not operate a power hand tool or portable appliance with a two-pronged adapter or a two-conductor extension cord.
- 15. Do not use a power hand tool while wearing wet cotton gloves or wet leather gloves.
- 16. Never operate electrical equipment barefooted. Wear rubber-soled or insulated work boots.
- 17. Do not operate a power hand tool or portable appliance while holding a part of the metal casing or holding the extension cord in your hand. Hold all portable power tools by the plastic handgrips or other nonconductive areas designed for gripping purposes.
- 18. Do not operate a power hand tool or portable appliance that has a frayed, worn, cut, improperly spliced, or damaged power cord.
- 19. Do not operate a power hand tool or portable appliance if the ground pin from the threepronged power plug is missing or has been removed.

Power Saws

- 1. Wear safety goggles, protective gloves, a dust mask, and hearing protection when operating a power saw.
- 2. Do not wear loose clothing or jewelry.
- 3. Clean any residue from the blade or cutting head before making a new cut with the power saw.
- 4. Do not use a power saw that has cracked, broken, or loose guards or other visible damage.
- 5. Keep your hands away from the exposed blade.
- 6. Operate the saw at full cutting speed, with a sharp blade, to prevent kickbacks.
- 7. Do not alter the anti-kickback device or blade guard.
- 8. Do not perform cutting operations with the power saw while standing on a wet or slippery floor.
- 9. When using the power saw, do not reach across the cutting operation.
- 10. Cut away from your body and below your shoulder level when you are using a power saw.
- 11. If the saw becomes jammed, turn the power switch of the saw to "Off" before pulling out the incomplete cut.

Pneumatic Tools

- 1. Do not point a compressed air hose at bystanders or use it to clean your clothing.
- 2. Do not use tools that have handles with burrs or cracks.
- 3. Do not use compressors if their belt guards are missing. Replace belt guards before use.
- 4. Turn the tool "off" and let it come to a complete stop before leaving it unattended.
- 5. Disconnect the tool from the airline before making any adjustments or repairs to the tool.
- 6. Engage positive locks on hoses and attachments before use.
- 7. Shut off pressure valve and disconnect airline when not in use.
- 8. Tag damaged or defective pneumatic tools "Out of Service" to prevent usage of the tool by other employees.

Powder Actuated Tools

- 1. Only employer-authorized personnel, with a valid certification card may operate powderactuated tools.
- 2. Wear safety glasses, goggles, or face shields when operating powder actuated tools.
- 3. Wear earplugs or earmuffs when making fastenings.
- 4. Do not permit bystanders in the area when using a powder-actuated tool.
- 5. Do not load tool until ready to make a fastening.
- 6. Keep tool pointed in a safe direction (away from personnel).
- 7. Post a sign alerting co-workers that a powder actuated tool is being used.
- 8. After use, lock powder actuated tools and powder loads in a container and store in a safe place such as a locker or the trunk of a car.

Carpet Laying

- 1. Carry knives in a leather pouch.
- 2. Keep sealing iron in the sealing iron tray when iron is energized.
- 3. When using power stretchers on long pulls, make sure the power head handle is locked down. Do not sit on handle or attempt to hold the handle down with your hand.
- 4. Do not leave knives and tools lying on the floor.
- 5. Wear kneepads.

Resilient Floor Coverings

- 1. Before you begin installation of the floor coverings, ventilate the area by opening windows, doors, or by using an exhaust fan.
- 2. Read labels and safety recommendations on all materials used in installation, i.e. adhesives, solvents, seam sealers, polishers, patching compounds, and cleaners.
- 3. Never leave propane torches that are being used for heating unattended.
- 4. Keep all flammable materials away from flame or spark.
- 5. Flush your skin or eyes with water if they are exposed to hazardous material.
- 6. Use heat resistant gloves when using heating tools.
- 7. Wear kneepads.
- 8. Keep the work area well lighted and uncluttered.

NOTE: When work involves the removal of a resilient floor covering structure that contains or is assumed to contain asbestos, always check with supervisor before proceeding.

Sanding Equipment

- 1. Always leave the floor sanding machine(s) unplugged until ready for use.
- 2. Unplug the belt sander when changing the sander belt.
- 3. Always use approved dust mask when sanding.

Stairways, Floors, and Openings

- 1. Do not work on open-sided floors, elevated walkways, or elevated platforms if there are no guardrails in place.
- 2. Stand clear of floor openings if guardrails or covers are removed or displaced.

BLOODBORNE PATHOGENS

Exposure Control Plan Access

Employees shall have access to a copy of the exposure control plan by request from their supervisor or the safety manager who will supply it in a reasonable time, place and manner.

Procedure Reviews and Updates

The exposure control procedure must be reviewed on an annual basis and updated whenever a new procedure, activity or function with the potential to expose employees to biohazards is introduced into a worksite.

Universal Precautions

Your employees shall observe universal precautions by treating all human blood and certain human body fluids as if they are known to be infectious for HIV, HBV and other pathogens even under circumstances where exposure is highly unlikely.

Exposure Controls

Exposure controls are designed to reduce or eliminate employee exposure to blood or potentially infectious materials and should be re-evaluated and revised if necessary on a regular basis to maximize their effectiveness in controlling employee exposure. Therefore:

- Hand washing facilities are readily available at all work locations except those that cannot support or simply do not have such facilities. In these cases, appropriate antiseptic solutions and / or towelettes are available for use.
- 2. All sharps containers shall have a biohazard-warning label or a specific color to identify it as a biohazard, shall be resistant to punctures and shall be leak proof. The same characteristics shall apply to all secondary sharps containers.

Safe Work Practices

Safe work practices are designed to support exposure controls and further minimize or eliminate occupational exposure. Therefore:

- 1. Employees must wash hands and other applicable body parts as soon as potentially contaminated gloves or other PPE are removed to further prevent contamination.
- 2. If any part of the body has contact with blood or any other infectious material, employees must wash hands and other exposed body parts with soap and water immediately.
- 3. Only trained and authorized personnel are allowed to handle sharps, sharps containers and any other potentially sharp and infectious needles or equipment.
- 4. Activities such as applying make up, handling contact lenses, smoking or any other hand and eye, mouth, nose, ear or other body part contact is prohibited in areas where exposure to biohazards is possible.
- 5. Storage areas such as pantries, freezers, refrigerators and others that may contain potentially infectious materials shall not contain food or drink.
- 6. All equipment and surfaces that have had contact with blood or other infectious materials must be properly cleaned and decontaminated.
- 7. All biological specimens must be contained in leak proof containers for handling, storage and transport to minimize potential contact with other surfaces and employees.

- 8. In cases where the exterior surface of the specimen container is contaminated; the container must be placed into another leak proof container, which shall be labeled as "for handling and storage".
- 9. All emergency responder, first aid or other potentially infectious supplies must be disposed of immediately and appropriately after contamination.

Personal Protective Equipment (PPE)

PPE shall be provided by your company at no cost to the employee and must be of proper fit, adequate for the task at hand and readily available. Defective or damaged PPE must be discarded / replaced or repaired in order to ensure maximum effectiveness.

The following safe work practices shall be followed with regard to biohazards and PPE:

- 1. Protective garments that are penetrated by blood or other infectious materials must be removed and properly disposed of immediately.
- 2. PPE that may be contaminated must be removed and properly stored / contained before leaving the work area.
- 3. PPE such as protective gloves must be worn whenever contact with potentially infectious material exposure is anticipated.
- 4. Disposable PPE such as rubber gloves must be replaced as soon as practical when contamination has occurred or when they are rendered ineffective by a tear, puncture or other occurrence.
- 5. Masks and eye protection (such as goggles, face shields, etc.) are used whenever splashes or sprays may generate droplets of infectious materials.
- 6. Whenever infectious material splashes, sprays or other similar occurrences are possible, PPE such as face shields, goggles, head garments or other appropriate PPE shall be used to protect face, eyes etc.
- 7. Adequate PPE must be used unless temporarily declined by the employee and approved by the safety manager.
- 8. PPE should be cleaned, laundered & properly disposed of if contaminated.
- 9. All PPE must be cleaned, maintained, used, stored and disposed of properly when applicable.

Post-Exposure Requirements

All potential blood or infectious material exposure incidents shall be investigated by the employer thoroughly to ensure that hazards are abated and that affected employees receive the necessary treatment needed to minimize the impact of potential or actual exposure.

All reported exposure incidents shall be formally investigated by the exposure control officer / safety manager or supervisor when the safety manager cannot be present. A detailed report of the incident outlining root cause, corrective actions and the current status of affected employees is then completed and reviewed by employer to help prevent re-occurrence. Additionally, the following confidential information shall be provided to exposed employees:

- 1. All documentary reports and information of the exposure incident and its circumstances.
- 2. The identity of the exposure source individual unless applicable laws prevent such identification.

Upon completion of the above procedures, the exposed employee shall be appointed to a qualified healthcare professional who will evaluate the exposed employee, provide information to the employee about his or her medical status and initiate treatment where applicable.

Employer shall provide the following information to the healthcare professional:

- 1. A copy of the biohazards standard.
- 2. A detailed description of the exposure incident.
- 3. Additional information that is relevant to the healthcare professional.

The following information will be provided to the employer by the healthcare professional as a "written report" and copied to the exposed employee upon completion of the healthcare professional's evaluation of exposed employee:

- 1. If a Hepatitis B vaccination is recommended for the exposed employee.
- 2. If the exposed employee has received the Hepatitis B vaccination since the incident.
- 3. Verification that the exposed employee has received results information of the medical evaluation.
- 4. Verification that the exposed employee was made aware of medical conditions caused by the exposure incident that require additional medical evaluation or treatment.

All other medical information remains confidential and will not be a part of the written report. The Hepatitis B vaccine will be made available to all employees with occupational exposure at no cost.

ELECTRICAL & LOCK-OUT / TAG-OUT PROGRAM

The company has developed the following procedures to protect our employees and reduce the risk of accidents. We will also conduct a periodic review of electrical safety, energy control procedures, and lock-out / tag-out, at least annually, to ensure that the procedure and the requirements of this section are being followed.

This procedure is binding upon all employees. All employees will be instructed in the significance of electrical safety, energy control procedures, and lock-out / tag-out. Each new employee shall be instructed by their Supervisor in the purpose and use of these procedures.

Retraining shall be provided for all authorized and affected employees whenever there is a change in their job assignments, a change in machines, equipment or processes that present a new hazard, or when there is a change in the energy control procedures. Additional retraining shall also be conducted whenever a periodic inspection reveals, or whenever the employer has reason to believe that there are deviations from or inadequacies in the employee's knowledge or use of the energy control procedures.

All Equipment and Installations

1. Only trained, qualified, and authorized employees will be allowed to make electrical repairs or work on electrical equipment or installations.

- 2. Employees may not enter spaces containing exposed energized parts unless illumination is provided that enables the employees to work safely.
- 3. Conductive articles of jewelry and clothing (such as watch bands, bracelets, rings, key chains, necklaces, metalized aprons, cloth with conductive thread, or metal headgear) may not be worn if they might contact exposed energized parts. However, such articles may be worn if they are rendered nonconductive by covering, wrapping, or other insulating means.
- 4. All electrical equipment and systems shall be treated as energized until tested or otherwise proven to be de-energized.
- 5. All energized equipment and installations will be de-energized prior to the commencement of any work. If the equipment or installation must be energized for test or other purposes, special precautions will be taken to protect against the hazards of electric shock.
- 6. All equipment shall be locked out to protect against accidental or inadvertent operation when such operation could cause injury to personnel. Do not attempt to operate any switch, valve, or other energy-isolating device bearing a lock.
- 7. Safety grounds shall always be used where there is a danger of shock from back feeding or other hazards.
- 8. Polyester clothing or other flammable types of clothing shall not be worn near electrical circuits. Cotton clothing is much less likely to ignite from arc blast. Employees working on live circuits shall be provided Nomex or equivalent fire resistant clothing.
- 9. Suitable eye protection must be worn at all times while working on electrical equipment.
- 10. Always exercise caution when energizing electrical equipment or installations. Take steps to protect employees from arc blast and exploding equipment in the event of a fault.
- 11. All power tools will be grounded or double insulated. Tools with defective cords or wiring shall not be used.
- 12. Suitable temporary barriers or barricades shall be installed when access to open enclosures containing exposed energized equipment is not under the control of an authorized person.

Temporary Power

- 1. All temporary power systems exposed to weather elements must be weatherproofed.
- 2. Conduit for underground temporary power feeds for the project site that are installed by the electrical subcontractor, or its sub-subcontractors of any tier shall be encased in concrete or marked with red plastic detectable warning tape 18 inches above the line.
- 3. Because underground temporary power is not typically registered with a state's one-call system, subcontractors conducting underground work shall not rely on the local one-call system to locate project-specific temporary power such as, but not limited to, project feed and tower cranes. Subcontractors must take action to positively locate the temporary service.
- 4. All underground or overhead temporary power feeds shall be clearly marked on the site utilization plan.
- 5. All 120-volt, single-phase, 15 and0 ampere receptacles for employee use during construction activities must be protected by a Ground Fault Circuit Interrupter system (GFCI). Assured equipment grounding conductor program shall not be used on 120-volts, however, can be used on voltage greater than 120 volts. All GFCI's that are part of a temporary electrical system must be tested monthly. The type and frequency of tests to be

performed by an electrical subcontractor on the project should be included in the subcontract agreement. In the absence of any reference in the subcontract agreement, tests must be performed as frequently as reasonably possible to ensure safe operation of the project.

- 6. At construction projects performing new work, as opposed to remodeling, GFCI protection may be accomplished by either installing approved GFCI-type breakers inside panel boxes or providing approved GFCI receptacles.
- 7. Any construction-related cord set, or electrical equipment plugged into existing permanent power receptacles must be protected by a GFCI.
- 8. When a portable GFCI is used in a non-GFCI receptacle, the GFCI must be plugged in at the power source (receptacle) end and not at the tool end. Portable GFCI's must be tested before each use.

Energized Equipment or Systems

- 1. Work shall not be performed on exposed energized parts of equipment or systems until the following conditions are met:
- 2. Responsible supervision has determined that the work is to be performed while the equipment or systems are energized.
- 3. Involved personnel have received instructions on the work techniques and hazards involved in working on energized equipment and appropriate equipment to perform the job has been provided.
- 4. Suitable personal protective equipment has been provided and is used. Suitable insulated gloves shall be worn for voltages in excess of 300 volts, nominal.
- 5. Suitable eye protection, including face shield and safety glasses or goggles, has been provided and is used.
- 6. Fire resistant clothing such as Nomex suits is worn.
- 7. Where required, suitable barriers, barricades, tags, or signs are in place for personnel protection.
- 8. After the required work on an energized system or equipment has been completed, an authorized person shall be responsible for:
- 9. Removing from the work area any personnel and protective equipment.
- 10. Reinstalling all permanent barriers or covers.

De-energized Equipment or Systems

- 1. A qualified person shall be responsible for completing the following before working on deenergized electrical equipment or systems, unless the equipment is physically removed from the wiring system:
- 2. Notifying all involved personnel.
- 3. Locking the disconnecting means in the "open" position with the use of lockable devices, such as padlocks, combination locks or disconnecting of the conductor(s) or other positive methods or procedures which will effectively prevent unexpected or inadvertent energizing of a designated circuit, equipment or appliance.
- 4. Tagging the disconnecting means with suitable accident prevention tags.

- 5. Effectively blocking the operation or dissipating the energy of all stored energy devices which present a hazard, such as capacitors or pneumatic, spring-loaded and like mechanisms. This may require the installation of safety grounds.
- 6. Testing the equipment to ensure it is de-energized.
- 7.

Energizing (or Re-energizing) Equipment or Systems

A qualified and authorized person shall be responsible for completing the following before energizing equipment or systems that have been de-energized:

- 1. Determining that all persons are clear from hazards which might result from the equipment or systems being energized including arc blast or explosions caused by unexpected faults.
- 2. Removing locking devices and tags. Only the employee who placed them may remove locking devices and tags. Locking devices and tags shall be removed upon completion of the work and after the installation of the protective guards and/or safety interlock systems.

Accident Prevention Tags

Suitable accident prevention tags shall be used to control a specific hazard. Such tags shall provide the following minimum information:

- 1. Reason for placing tag.
- 2. Name of person placing the tag and how that person may be contacted.
- 3. Date tag was placed.

Lock-out / Tag-out

Machinery or equipment capable of movement shall be stopped and the power source deenergized or disengaged, and locked out. If necessary, the moveable parts shall be mechanically blocked or secured to prevent inadvertent movement during cleaning, servicing or adjusting operations unless the machinery or equipment must be capable of movement during this period in order to perform the specific task. If so, the hazard of movement shall be minimized.

Equipment or power driven machines equipped with lockable controls, or readily adaptable to lockable controls, shall be locked out or positively sealed in the "off" position during repair work and setting-up operations. In all cases, accident prevention signs and/or tags shall be placed on the controls of the equipment or machines during repair work.

The company will provide a sufficient number of accident prevention signs or tags and padlocks, seals or other similarly effective means that may be required by any reasonably foreseeable repair.

Sequence of Lockout Procedure

- 1. Individual applying the device shall be identified. Individual shall notify all affected employees that a lockout is required and the reason therefore.
- 2. If the equipment is operating, shut it down by the normal stopping procedure (such as: depress stop button, open toggle switch).

- 3. Operate the switch, valve, or other energy isolating devices so that the energy source(s) (electrical, mechanical, hydraulic, & other) is disconnected or isolated from the equipment.
- 4. Stored energy, such as that in capacitors, springs, elevated machine members, rotating fly wheels, hydraulic systems, and air, gas, steam or water pressure, must also be dissipated or restrained by methods such as grounding, repositioning, blocking, bleeding down.
- 5. Lockout energy isolating devices with an assigned individual lock.
- 6. After ensuring that no personnel are exposed and as a check on having disconnected the energy sources, operate the push button or other normal operating controls to make certain the equipment will not operate. CAUTION: Return operating controls to neutral position after the test.

Procedure Involving More Than One Person

If more than one individual is required to lock out equipment, each shall place his/her own personal lock on the energy isolating device(s). One designated individual of a work crew or a Supervisor, with the knowledge of the crew, may lock out equipment for the whole crew. In such cases, it may be the responsibility of the individual to carry out all steps of the lockout procedure and inform the crew when it is safe to work on the equipment. Additionally, the designated individual shall not remove a crew lock until it has been verified that all individuals are clear.

Testing Equipment during Lockout

In many maintenance and repair operations, machinery may need to be tested, and for that purpose energized, before additional maintenance work can be performed. This procedure must be followed:

- 1. Clear all personnel to safety.
- 2. Clear away tools and materials from equipment.
- 3. Remove lockout devices and re-energize systems, following the established safe procedure.
- 4. Proceed with tryout or test.
- 5. Neutralize all energy sources once again, purge all systems, and lockout prior to continuing work.

Equipment design and performance limitations may dictate that effective alternative worker protection be provided when the established lock-out procedure is not feasible.

Restoring Equipment to Service

After the work is completed and the equipment is ready to be returned to normal operation, this procedure must be followed:

- 1. Remove all non-essential items.
- 2. See that all equipment components are operationally intact, including guards and safety devices. Repair or replace defective guards before removing lockouts.
- 3. Remove each lockout device using the correct removal sequence.

4. Make a visual check before restoring energy to ensure that everyone is physically clear of the equipment.

FALL PROTECTION

The company has the following requirements for fall protection at all of our worksites.

Fall Protection is Required

When working where there is a hazard of falling more than 6 feet from the perimeter of a structure, unprotected sides and edges, leading edges, through shaft ways and openings, sloped roof surfaces steeper than 7:12, or other sloped surfaces steeper than 40 degrees not otherwise adequately protected. Fall protection is also required when working in boom lifts.

Fall Protection Types

One of the following four types of fall protection systems will be used when our employees are exposed to fall hazards in excess of 6 feet:

- 1. Standard guardrails, cables or floor hole covers
- 2. Personal fall arrest system
- 3. Positioning devices
- 4. Fall restraint systems

Standard Guardrails, Safety Cables, or Covers

These are the easiest and most cost effective methods of providing fall protection and have a very high success rate. Standard guardrails, safety cables, floor hole and sky light covers are our preferred means of fall protection on job sites. The following rules will be followed when using them:

- Railings shall be constructed of wood, or in an equally substantial manner from other materials, and shall consist of a top rail not less than 42 inches or more than 45 inches in height measured from the upper surface of the top rail to the floor, platform, runway or ramp level and a mid-rail. The mid rail shall be halfway between the top rail and the floor, platform, runway or ramp. "Selected lumber" free from damage that affects its strength, shall be used.
- 2. Wooden posts shall be not less than inches by 4 inches in cross section, spaced at 8-foot or closer intervals.
- 3. Wooden top railings shall be smooth and of-inch by 4-inch or larger material. Double, 1inch by 4-inch members may be used for this purpose, provided that one member is fastened in a flat position on top of the posts and the other fastened in an edge-up position to the inside of the posts and the side of the top member. Mid rails shall be of at least 1-inch by 6-inch material.
- 4. The rails shall be placed on the side of the post that will afford the greatest support and protection.

- 5. All guardrails, including their connections and anchorage, shall be capable of withstanding a load of 13 pounds per linear foot applied either horizontally or vertically downward at the top rail.
- 6. Railings receiving heavy stresses from employees trucking or handling materials shall be provided additional strength by the use of heavier stock, closer spacing of posts, bracing, or by other means.
- 7. Floor, roof and skylight openings shall be guarded by a standard railing and toe boards or cover. Covering shall be capable of safely supporting the greater of the weight of a00-pound person or the weight of worker(s) and material(s) placed thereon.
- 8. Coverings shall be secured in place to prevent accidental removal or displacement, and shall bear a pressure sensitized, painted, or stenciled sign with legible letters not less than one inch high, stating: "Opening--Do Not Remove." Markings of chalk or keel shall not be used.
- 9. Ladder way floor openings or platforms shall be guarded by standard railings with standard toe boards on all exposed sides, except at the entrance to the opening, with the passage through the railing either provided with a swinging gate or so offset that a person cannot walk directly into the opening.
- 10. Floor holes, into which persons can accidentally walk, shall be guarded by either a standard railing with standard toe boards on all exposed sides, or a floor hole cover of standard strength and construction that is secured against accidental displacement. While the cover is not in place, the floor hole shall be protected by standard railings.
- 11. Wall openings, from which there is a drop of more than 4 feet, and the bottom of the opening is less than 3 feet above the working surface, shall be guarded with either a standard rail or intermediate rail or both.
- 12. An extension platform outside a wall opening onto which materials can be hoisted for handling shall have side rails or equivalent guards of standard specifications. One side of an extension platform may have removable railings in order to facilitate handling materials.
- 13. Wall opening protection barriers shall be of such construction and mounting that, when in place at the opening, the barrier is capable of withstanding a load of at least00 pounds applied in any direction (except upward).
- 14. All elevator shafts in which cages are not installed and which are not enclosed with solid partitions and doors shall be guarded on all open sides by standard railings and toe boards.
- 15. A full body harness and lanyard are required when using boom lifts.

Personal Fall Arrest Systems

Personal fall arrest systems consist of a full body harness and a shock-absorbing lanyard attached to suitable anchorage. They are also an effective means of preventing fall accidents. The system does not actually stop you from falling, but catches you and safely stops you from hitting the level below. Fall arrest systems will be our preferred means of protection when standard guardrails, safety cables, or covers are not practical. The following rules, in addition to the manufacturer's requirements and OSHA regulations, will be observed:

- 1. Ropes and straps (webbing) used in lanyards, lifelines, and strength components of body harnesses shall be made from synthetic fibers except when they are used in conjunction with hot work where the lanyard may be exposed to damage from heat or flame.
- 2. Anchorages used for attachment of personal fall arrest equipment shall be independent of any anchorage being used to support or suspend platforms and capable of supporting at least 5,000 pounds per employee attached, or shall be designed, installed, and used as part of a complete personal fall arrest system which maintains a safety factor of at least two; and under the supervision of a qualified person.
- 3. The attachment point of the body belt shall be located in the center of the wearer's back. The attachment point of the body harness shall be located in the center of the wearer's back near shoulder level, or above the wearer's head.
- 4. Where practical, the anchor end of the lanyard shall be secured at a level not lower than the employee's waist, limiting the fall distance to a maximum of 4 feet.
- 5. Harnesses, lanyards, and other components shall be used only for employee protection as part of a personal fall arrest system and not to hoist materials.
- 6. Personal fall arrest systems and components subjected to impact loading shall be immediately removed from service and shall not be used again for employee protection until inspected and determined by a competent person to be undamaged and suitable for reuse.
- 7. The company shall provide for prompt rescue of employees in the event of a fall or shall assure that employees are able to rescue themselves.
- 8. Personal fall arrest systems shall be inspected prior to each use for wear, damage and other deterioration, and defective components shall be removed from service.
- 9. Any lanyard, safety harness, or drop line subjected to in-service loading, as distinguished from static load testing, shall be immediately removed from service and shall not be used again for employee safeguarding.
- 10. Personal fall arrest systems shall not be attached to guardrails, unless the guardrail is capable of safely supporting the load.
- 11. Each personal fall arrest system shall be inspected not less than twice annually by a competent person in accordance with the manufacturer's recommendations. The date of each inspection shall be documented.
- 12. Personal fall arrest systems will be rigged such that an employee can neither free fall more than 4 feet, nor contact any lower level.
- 13. Personal fall arrest systems will bring an employee to a complete stop. They will also limit maximum deceleration distance an employee travels to 3.5 feet and have sufficient strength to withstand twice the potential impact energy of an employee free falling a distance of 6 feet, or the free fall distance permitted by the system, whichever is less.

Positioning Device Systems

Positioning device systems are designed to allow employees to work with both hands free at elevated locations. By their very nature, they provide some level of fall protection. They are not as effective as railings or fall arrest systems. Positioning device systems may be used together with a fall arrest system for greater safety. Their use shall conform to the following provisions:

- 1. Positioning devices shall be rigged such that an employee cannot free fall more than feet.
- 2. Positioning device systems shall be inspected prior to each use for wear, damage, and other deterioration and defective components shall be removed from service.
- 3. Body belts, harnesses, and components shall be used only for employee protection (as part of a personal fall arrest system or positioning device system) and not to hoist materials.
- 4. The use of non-locking snap hooks is prohibited.
- 5. Anchorage points for positioning device systems shall be capable of supporting two times the intended load or 3,000 pounds, whichever is greater.

Personal Fall Restraint

Fall restraint systems are designed to prevent the wearer from reaching the edge or danger area and thus prevent them from falling. Body belts or harnesses may be used for personal fall restraint.

- 1. Body belts shall be at least one and five-eighths (1 5/8) inches wide.
- 2. Anchorage points used for fall restraint shall be capable of supporting 4 times the intended load.
- 3. Restraint protection shall be rigged to allow the movement of employees only as far as the sides of the working level or working area.

FIRST AID AND MEDICAL EMERGENCY PROCEDURES

The company will ensure the availability of emergency medical services for its employees at all times. We will also ensure the availability of a suitable number of American Red Cross or equivalent trained persons to render first aid. The Safety Program Administrator will maintain a list of trained individuals and take steps to provide training for those that desire it.

First-Aid Kits

Every work site shall have access to at least one first-aid kit in a weatherproof container. The firstaid kit will be inspected regularly to ensure that it is well stocked, in sanitary condition, and any used items are promptly replaced. The contents of the first-aid kit shall be arranged to be quickly found and remain sanitary. First-aid dressings shall be sterile and in individually sealed packages. Eye washing equipment shall also be made readily available.

Drugs, antiseptics, inhalants, medicines, or proprietary preparations shall not be included in first-aid kits unless specifically approved, in writing, by an employer-authorized, licensed physician. Other supplies and equipment, if provided, shall be in accordance with the documented recommendations of an employer-authorized licensed physician upon consideration of the extent and type of emergency care to be given based upon the anticipated incidence and nature of injuries and illnesses and availability of transportation to medical care.

First Aid

The designated first aid person on each site will be available at all times to render appropriate first aid for injuries and illnesses. Proper equipment for the prompt transportation of the injured or ill person to a physician or hospital where emergency care is provided, or an effective communication system for contacting hospitals or other emergency medical facilities, physicians, ambulance and fire services, shall also be provided. The telephone numbers of the following emergency services in

1. A company authorized physician or medical clinic, and at least one alternate if available.

the area shall be posted near the job telephone, or otherwise made available to the employees

- 2. Hospitals.
- 3. Ambulance services.
- 4. Fire-protection services.

where no job site telephone exists:

Prior to the commencement of work at any site, the Supervisor or Manager shall locate the nearest preferred medical facility and establish that transportation or communication methods are available in the event of an employee injury.

Each employee shall be informed of the procedures to follow in case of injury or illness through our new employee orientation program, Code of Safe Practices, and safety meetings.

Where the eyes or body of any person may be exposed to injurious or corrosive materials, suitable facilities for drenching the body or flushing the eyes with clean water shall be conspicuously and readily accessible.

Accident Procedures

These procedures are to be followed in the event of an employee injury in the course of employment.

- 1. For severe accidents call 911 and request the Paramedics.
- 2. Employees must report all work related injuries to their Supervisor immediately. Even if they do not feel that it requires medical attention. Failure to do so may result in a delay of Workers' Compensation benefits and disciplinary action.
- 3. The Supervisor, employee, and first aid person, should determine whether or not outside medical attention is needed. When uncertainty exists on the part of any individual, the employee should be sent for professional medical care.
- 4. If medical attention is not desired or the employee refuses treatment, you must still fill out a company "Accident Report" in case complications arise later.
- 5. In all cases, if the employee cannot transport himself or herself for any reason, transportation should be provided.

6. In the event of a serious accident involving hospitalization for more than4 hours, amputation, permanent disfigurement, loss of consciousness or death, phone contact should be made with the main office. Contact must also be made with the nearest Federal or State (if applicable) OSHA office.

HAZARD COMMUNICATION PROGRAM

Purpose

The purpose of this program is to ensure that the hazards of all chemicals and substances identified and evaluated, and that the information concerning their hazards is communicated to employees, emergency response organizations, state and federal agencies, and other employers and contractors, as necessary. This hazard information will be clearly communicated, and displayed in accordance with this Hazard Communication Program.

Our company is firmly committed to providing each of its employees a safe and healthy work environment. It is recognized that workers may use chemicals or substances that have potentially hazardous properties. When using these substances, workers must be aware of the identity, toxicity or hazardous properties of a chemical or substance. We believe an informed employee is more likely to be a safe employee. To this end, we have established and implemented a written Hazard Communication Program.

Scope

This program is applicable to all employees who may come in contact with hazardous chemicals while working. This document is to be followed by all employees and contractors on company owned premises. In addition, this program is to be used in the event an operator program does not exist or is less stringent than our own.

Definitions

- 1. Chemical any element, chemical compound, or mixture of elements and/or compounds.
- 2. Chemical Inventory List a list of chemicals used at this facility, or by personnel that report to this facility.
- 3. Electronic Access using electronic media (telephone, fax, internet, etc.) to obtain Material Safety Data Sheets or health information.
- 4. Facility an establishment at one geographical location containing one or more work areas.
- 5. (GHS) Globally Harmonized System The Globally Harmonized System (GHS) is an international approach to hazard communication, providing agreed criteria for classification of chemical hazards, and a standardized approach to label elements and safety data sheets. NOTE: Most new GHS requirements apply to substance manufacturers or distributors since they are responsible for including safety data sheets with purchased substances. However, all employers are still required to train each employee on the new label elements and safety data sheets format. Specific training information can be found at: https://www.osha.gov/dsg/hazcom/
- 6. Hazardous Chemical any chemical that is a physical hazard, a health hazard, or has a Permissible Exposure Limit established for it.

- 7. Hazardous Substance see hazardous chemical.
- 8. Hazard Communication Program Coordinator the person who has overall responsibility at a facility for that facility's Hazard Communication Program.
- 9. Health Hazard a substance for which there is statistically significant evidence based on at least one study conducted in accordance with established scientific principles that acute or chronic adverse health effects may occur in exposed employees.
- 10. IDLH immediately dangerous to life and health.
- 11. Immediate Use the chemical will be under the control of and used only by the person who transfers it from a labeled container and only within the work shift in which it is transferred.
- 12. Job Site an area remote from a facility where hazardous chemicals are stored or used and employees are present for the purpose of business.
- 13. (NFPA) National Fire Protection Association Labeling a common industry labeling method developed by the National Fire Protection Association to identify the hazards associated with a particular chemical.
- 14. (PEL) Permissible Exposure Limit the maximum eight-hour time weighted average of any airborne contaminant to which an employee may be exposed.
- 15. Readily Available when an employee has access during the course of his/her normal work shift.
- 16. (SDS) Safety Data Sheet a written or printed document containing chemical hazard and safety handling info, prepared in accordance with the new HAZCOM GHS requirements.
- 17. Substance see Chemical.
- 18. (TLV) Threshold Limit Value the airborne concentration of a substance that represents conditions under which it is believed that nearly all normal workers may be repeatedly exposed day after day without adverse effect.
- 19. Work Area a room or defined space in a facility where hazardous chemicals are stored or used and where one or more employees are present.
- 20. Workplace see Facility.
- 21. Workplace Chemical List see Facility Chemical List.

Responsibilities

A written hazard communication program shall be developed, implemented and maintained at each workplace. The program will describe how labels and other forms of warning, material safety data sheets and employee information will be kept, maintained, and disseminated.

The Safety Manager is responsible for developing and implementing the Hazard Communications Program. Managers are responsible for maintaining Safety Data Sheets and the Chemical Inventory List for their respective locations. The Safety Manager reviews the SDS files and Chemical Inventory List at each location at least annually to ensure they are current and complete.

The Safety Manager is also responsible for ensuring that all containers from manufacturers or distributors have the correct and updated labels per the new GHS requirements and for ensuring

that all applicable employees are trained on the new label elements and safety data sheets format. Training info can be found here: https://www.osha.gov/dsg/hazcom/

Employees are responsible for following the requirements set forth in the Hazard Communication Program, to use proper personal protective equipment, to report containers without labels immediately to their supervisor and to never deface any label.

Any employee who transfers any material from one container to another is responsible for labeling the new container with all required information.

All employees are responsible for learning the requirements of this section and for applying them to their daily work routine.

Requirements Introduction

This Hazard Communication Program was prepared for use by your company to explain how we meet the requirements of the federal Occupational Safety and Health Administration's (OSHA's) Hazard Communication Standard (29 CFR 1910.1200). It spells out how we inventory chemicals stored and used, how we obtain and use safety data sheets, how we maintain labels on chemical substances, and how we train employees about the hazards of chemicals they are likely to come in contact with on the job.

Preparation of this program indicates our continuing commitment to safety among our employees in all of our locations.

Each facility is expected to follow this program and maintain its work areas in accordance with these requirements.

Employees, their designated representatives, and government officials must be provided copies of this program upon request.

As part of our ongoing hazard communication effort, we will make available other information in addition to the program to any worker requesting it.

Asking to see this information is an employee's right,

Using this information is part of our shared commitment to a safe, healthy workplace.

List of Hazardous Chemicals

Maintains a listing of all known hazardous chemicals known to be present at each job site by using the identity it is referenced by on the appropriate safety data sheet (SDS). This identity is often a common name, such as the product or trade name (i.e., Lime-A-Way).

The Chemical Inventory List is updated annually by the Hazard Communication Program Coordinator or their designee with additional updates being made when necessary. The facility Chemical Inventory List must be available for review upon request. Additionally, a written hazard communication program must be developed, implemented & maintained at each workplace.

Material Safety Data Sheets | Now "Safety Data Sheets" due to the new GHS requirements. Chemical manufacturers are responsible for developing MSDS's, now SDS's. Company shall have an SDS for each chemical used with the exception of consumer products. SDS's must be obtained for each required chemical from the chemical manufacturer, supplier, or vendor. The purchasing of any potentially hazardous chemical products from any supplier that does not provide an appropriate Safety Data Sheet in a timely fashion is strictly prohibited.

MSDS's now known as SDS's shall be maintained and readily accessible in each workplace. SDS's can be maintained at the primary work site, however, they should be immediately available in case of emergency. SDS's must be made available upon request to employees, their designated representatives, the Assistant Secretary of Labor, and to the Director of OSHA.

Safety Data Sheets are filed alphabetically, and by material classification, in the SDS Book. A Chemical Inventory List is provided in the front of the SDS Book, listing all SDS' contained therein. This inventory serves as the index of the SDS Book. The SDS Book shall be displayed in a prominent location in the work area where it is accessible to all employees.

A copy of a SDS request form is located in the first section of the SDS Book. An employee may use a copy of this form to request an SDS or he may ask the Manager for one. In either case, the requested SDS must be given to the employee within4 hours of being requested.

The Safety Data Sheet must be kept in the SDS library for as long as the chemical is used by the facility.

Electronic access (telephone, fax, Internet, etc.) may be used in the acquisition of any needed SDS and to maintain SDS libraries and archives.

The Manager is responsible for seeing that the Chemical Inventory List inventory is maintained, is current, and is complete. He will review and update the inventory and the SDS Book at least annually. When a hazardous material has been permanently removed from the work place, its SDS is to be removed from the SDS's Book and the Chemical Inventory List. The SDS is then placed in a "dead file" in case it is needed in the future.

SDS's for hazardous materials to which employees have been exposed must be maintained after the employee leaves your employment.

Employees will be advised of all special instructions, PPE, and the hazards associated with chemicals-including chemicals contained in unlabeled pipes-in their work areas. The Manager will inform employees of the hazards of non-routine tasks by presenting a copy of the site specific

hazardous materials list, ensuring that the employee is aware of their presence should a non-routine task with unfamiliar materials present itself.

Employees have the right to request SDS on any chemical, which must then be provided without any issues.

Labels, Labeling and Warnings:

- 1. The Manager will ensure that all hazardous chemicals used or stored in the facility are properly labeled.
- 2. Damaged labels or labels with incomplete information shall be reported immediately,
- 3. Damaged labels on incoming containers of chemicals will not be removed,
- 4. New labels shall be provided as needed so that all containers are labeled correctly,
- 5. Only containers into which an employee transfers a chemical for their own immediate use will not require labeling,
- 6. Employees who are unsure of the contents of any container, vessel, or piping must contact their supervisor for information regarding the substance including:
- 7. The name of the substance,
- 8. The hazards associated with the substance,
- 9. The safety precautions required for working with the substance.

Labels, tags, or markings on containers shall use the following 16-section (GHS) formatting convention and headings:

- Identification
- Hazard(s) identification
- Composition/information on ingredients
- First-Aid measures
- Fire-fighting measures
- Accidental release measures
- Handling & Storage

- Exposure controls/personal protection
- Physical and chemical properties
- Stability and reactivity
- Toxicological information
- Ecological information
- Disposal considerations
- Transport information
- Regulatory information

Other information, including date of preparation or last revision

All containers must be labeled correctly under the new GHS HAZCOM standard (this responsibility usually falls upon the manufacturers shoulders. However, if labels are not present for any reason, employers are responsible for labeling containers. Upon transferring the content of one container to another, the employee must label the new container with all required information. This information can be obtained from the labeling of the original container or from the material's SDS. Any container of a potentially hazardous material that will not be emptied during one shift must be labeled, without exception.



Personnel in the Shipping and Receiving Departments are responsible for the proper labeling of all containers shipped by company and for the inspection of all incoming materials for correct labeling. Chemicals received from vendors that are improperly labeled must be rejected.

NFPA Standard 704 labels shall be the preferred hazard identification method used in company facilities and on materials containers used on client sites. All employees, clients, subcontractors, and visitors who may come in contact with a hazardous substance must be briefed to ensure understanding of the NFPA 704 labeling system.

Training

Employees shall be provided with appropriate, effective information and training on the hazardous chemicals in their work area at the time of their initial assignment, and upon the introduction of a new physical or health hazard into their work area. Information and training may be designed to cover categories of hazards (e.g., flammability, carcinogenic) or specific chemicals. However, chemical-specific information must always be available through labels and safety data sheets.

Additional training will be provided whenever a new chemical hazard is introduced into the work area. Supervisors will conduct supplementary training when deemed necessary in order to reinforce the importance of the proper use and handling of chemicals.

Only facility employees and individuals knowledgeable with company Hazard Communication program will conduct training sessions.

The Manager shall ensure records of employee training are maintained properly.

When an outside contractor, such as a pest control worker or a carpenter, enters a company site in order to perform a service for company, they must first present SDS' for any and all hazardous chemicals which will be used. These SDS' will be treated with the same training requirements as the SDS' kept on site for regularly used chemicals and materials. The Manager will be responsible for contacting each contractor prior to work commencing, in order to gather and disseminate any information concerning chemical hazards the contractor is bringing into the work place.

The Hazard Communication Program documented training shall, as a minimum, include:

- 1. Requirements, details, and rights of the employee as contained in the Hazard Communication regulation,
- 2. Operations and work areas where hazardous chemicals are present,
- 3. Location of the written Hazard Communication Program, SDS's and the Chemical Inventory List,
- 4. How to access SDS's or SDS information,
- 5. How to read labels and Safety Data Sheets for pertinent hazard information,
- 6. How employees can obtain and use the appropriate hazard information,
- 7. Methods and observations that may be used to detect the presence or release of hazardous chemicals by use of monitoring devices, visual appearance or odor,
- 8. The physical & health hazards of chemicals in the immediate work area,



- 9. Protection measures utilized for the prevention of hazards related to exposure,
- 10. Appropriate work practices,
- 11. Emergency procedures,
- 12. The use of proper PPE.

Multiple Work Sites

Where employees must travel between work places during a work shift, the written HAZCOM Program shall be kept at a primary job site. If there is no primary job site, then the program shall be sent with employees.

The program shall be made available, upon request, to employees, their designated representatives, the Assistant Secretary, and the Director in accordance with requirements of 9 CFR 1910.1020(e).

Multiple Employer Job Sites

A pre-job briefing shall be conducted with the contractor before work commences on site.

- During this pre-job briefing, contractors shall provide to company current copies of all Safety Data Sheets along with the label information for every hazardous substance brought on-site.
- 2. Must notify and provide required SDS and label information for all hazardous materials the contractor may encounter on the job,
- 3. Labeling systems and precautionary measures to be taken by the contractor during both normal conditions and emergencies shall be addressed,
- 4. By providing such information to other employers, company does not assume any obligations that other employers have for the safety of their employees,
- 5. In this regard, other employers working on company property, or for company on client's property, remain fully responsible for developing and implementing their own compliant hazard communication programs.

Hazard Warnings / NFPA 704

The NFPA 704 Diamond is a means of disseminating hazard warning and information for a specific material. The diamond is divided into four sections. Each of the first three colored sections has a number in it associated with a particular hazard. The higher the number is, the more hazardous a material is for that particular characteristic.

HEAT ILLNESS AND PREVENTION

All managers and supervisors will implement and maintain the Heat Illness Program in their respective work areas. High heat procedures are to be followed when the temperature exceeds 95 degrees Fahrenheit. High heat procedures shall include, but are not limited to:

- 1. Effective communication by voice, observation or electronic means,
- 2. Will observe employees for alertness and signs/symptoms of heat illness often,
- 3. Reminding employees to drink water throughout the shift,



- 4. Closely supervise new employees for their first 14 days of employment,
- 5. The provisions of this procedure.

Provision of Water

Employees shall have access to potable drinking water. Where it is not plumbed or otherwise continuously supplied, it shall be provided in sufficient quantity at the beginning of the work shift. Access to Shade

Employees must have access to shade. At or below 85 degrees Fahrenheit the employee shall have timely access to shade upon request. For temperatures at or above 85 degrees Fahrenheit, one or more areas with shade shall be provided at all times while employees are present. There should be enough shade for at least5% of employees on the shift at any one time to use.

Employees suffering from heat illness or those who believe a preventative recovery period is needed shall be provided access to an area with shade that is either open to the air or provided with ventilation or cooling for a period of no less than five minutes. Such access to shade shall be permitted at all times. See definition of "Shade".

Written Procedures

The heat prevention program/procedures shall be in writing and shall be made available to employees.

Each work site shall develop site specific procedures which shall include the minimum:

- Make available at least quarts of water per employee at the start of the shift. The supervisors or designated persons will monitor water containers every 30 minutes. Employees are encouraged to report to the supervisor/designated person water that is dirty or an inadequate water supply.
- 2. Supervisors will provide frequent reminders to employees to drink frequently.
- 3. Workers will be reminded every morning of the importance of frequent consumption of water throughout the shift during hot weather.
- 4. Place water containers as close as possible to the workers.
- 5. Water levels should not fall below the point that will provide adequate water for all employees during the time necessary to effect replenishment.
- 6. Disposable/single use drinking cups will be provided to employees or provisions will be made to supply employees their own cups.
- 7. Supervisors will set-up an adequate number of umbrellas, canopies or other portable devices at the start of the shift and will relocate them to be closer to the crew, as needed.
- 8. Non-agricultural employers can use other cooling measures if they demonstrate that these methods are as effective as shade.

Working hours will be modified to work during the cooler hours of the day, when possible. More water and rest breaks will be provided when a modified or shorter work-shift is not possible. Supervisors will continuously monitor all employees and stay alert to the presence of heat related symptoms.



Supervisors will carry cell phones or other means of communication, to ensure that emergency services can be called. They will check that all means of communication are functional at the work-site prior to each shift.

Every morning, workers will be reminded about the address and directions to their work-site so as to inform medical responders.

All newly hired workers will be assigned a buddy or experienced coworker to ensure they receive proper training and are following the company procedures in regards to heat illness prevention.

NOISE CONSERVATION

This policy is to ensure no employee is exposed to noise that exceeds the action levels. Designated Safety Program Administrator is the designated supervisor for ensuring the following engineering controls and work practices will be enforced.

Training

Upon initial hiring, all employees will be trained about being exposed to noise at or above an 8-hour time weighted average of 85 decibels. The hazards presented by excessive noise levels in the workplace, and the use and care of hearing protection devices. Training will be repeated annually for each employee and updated to reflect changes in personal protective equipment (PPE) and work processes or requirements. The Safety Program Administrator will ensure the participation of all employees and make copies of the noise exposure procedures available to affected employees and will also post a copy in the workplace and allow OSHA access to records.

Hearing Protection

Hearing protectors are available upon request from Safety Program Administrator at no cost to all employees exposed to an 8-hr. time-weighted average of 85 decibels. Hearing protection will be replaced as necessary. The company will evaluate hearing protection for the specific noise environments in which the protector will be used.

Each employee will be properly trained in the use, care, and fitting of hearing protectors. The Safety Program Administrator will ensure that hearing protectors are worn. Employees will be given the opportunity to select their hearing protectors from a variety of suitable hearing protectors.

The company will provide a continuing effective hearing conservation program when employees are exposed to sound levels greater than 85 dBs on an 8-hour time-weighted average basis.

When information indicates that employee exposure may equal/exceed the 8-hour time-weighted avg. of 85 decibels, Safety Program Administrator will implement a monitoring program to identify employees to be tested.

Safety Program Administrator will ensure that hearing protectors are worn:

- 1. By an employee who is required by paragraph (b)(1) of this section to wear personal protective equipment; and
- 2. By any employee who is exposed to an 8-hour time-weighted average of 85 decibels or greater, and who:



- 3. Has not yet had a baseline audiogram established pursuant to paragraph (g)(5)(ii);
- 4. Has experienced a standard threshold shift

Audio Monitoring

Audio monitoring will be implemented if it is believed noise levels in work areas are approaching or exceed action level limits. If monitoring results indicate exposures equaling or exceeding safe limits, an employee will be included in a hearing conservation program.

All continuous, intermittent, and impulsive sound levels from 80 decibels to 130 decibels shall be integrated into the noise measurements. Instruments used to measure employee noise exposure shall be calibrated to ensure measurement accuracy.

- 1. Monitoring shall be repeated whenever a change in production, process, equipment or controls increases noise exposures to the extent that:
- 2. Additional employees may be exposed at or above the action level; or
- 3. The attenuation provided by hearing protectors being used by employees may be rendered inadequate to meet the requirements

Employee notification. The employer shall notify each employee exposed at or above an 8-hour time-weighted average of 85 decibels of the results of the monitoring.

Observation of monitoring. The employer shall provide affected employees or their representatives with an opportunity to observe any noise measurements conducted pursuant to this section.

When employees are subjected to sounds exceeding those listed in the below table, feasible administrative or engineering controls shall be utilized. If such controls fail to reduce sound levels within the levels of the table, personal protective equipment shall be provided and used to reduce sound levels within the levels of the table overleaf.

Methods of Control

All monitoring results shall be reviewed by the site safety representative. Upon receiving results that indicate noise levels to be above the action level, the site safety representative shall determine which of the following control methods shall be utilized to reduce or eliminate the hazard:

- 1. The Safety Program Administrator shall first determine if any means of engineering the problem out are possible. Some of these means may include such things as eliminating the job all together, shortening the length of the job, or installing barriers to reduce noise levels
- 2. If engineering controls are not feasible, then administrative controls shall be taken into consideration. This type of control would include such activity as using job rotation
- 3. Only when it is not feasible for management to implement a type of engineering or administrative control will PPE be used as the primary control method

Audio Metric Testing

The Safety Program Administrator will maintain an audiometric testing program by making audiometric testing available to all employees whose exposures equal or exceed an 8-hr. lime-weighted avg. 85 decibels. The program is provided at no cost to employees.



Within 6 months of an employee's first exposure at or above the action level a valid baseline audiogram against which future audiograms can be compared. When a mobile van is used, the baseline shall be established within 1 year.

Testing to establish a baseline audiogram will be preceded by at least 14 hours without exposure to workplace noise. Hearing protection may be used to meet the requirement. Employees will also be notified to avoid high levels of noise.

At least annually after obtaining the baseline audiogram, Safety Program Administrator will obtain a new audiogram for each employee exposed at or above an 8-hour time-weighted average of 85 decibels. Each employee's annual audiogram shall be compared to that employee's baseline audiogram to determine if the audiogram is valid and if a standard threshold shift has occurred. If a comparison of the annual audiogram to the baseline audiogram indicates a standard threshold shift, the employee shall be informed of this fact in writing, within1 days of the determination.

If a standard threshold shift occurs, use of hearing protection shall be re-evaluated and/or refitted and if necessary, a medical evaluation may be required. The following procedures will be implemented:

- 1. Employees not using hearing protectors will be fitted with hearing protectors, trained in their use and care, and required to use them
- 2. Employees already using hearing protectors will be refitted and retrained in the use of hearing protectors and provided with hearing protectors offering greater attenuation if necessary
- 3. Employees will be referred for a clinical audiological evaluation or an ontological examination, as appropriate, if additional testing is necessary or if it is suspected that a medical pathology of the ear is caused or aggravated by the wearing of hearing protectors
- 4. Employees will be informed of the need for an ontological examination if a medical pathology of the ear that is unrelated to the use of hearing protectors is suspected

Hearing protection is available at no cost to all employees upon request from the jobsite foreman or company office.

Recordkeeping

All records collected by this policy, and specifically maintain noise exposure measurement records for at least two years and audiometric test records for the entire length of each employee's employment. These records will also be transferred to any successor employer.

PPE PROGRAM

General

Subcontractors should provide protective equipment, including personal protective equipment (for head, eyes, face, and extremities), respiratory devices, protective clothing, and protective shields and barriers. This protective equipment must be used wherever injury or impairment of function of any body part (through absorption, inhalation or physical contact) is likely that because of process



or environmental hazards, radiological hazards, chemical hazards, or mechanical irritants. All PPE shall be provided, used and maintained in a sanitary and reliable condition.

Defective or damaged equipment shall not be used and must be tagged or destroyed and replaced.

Training

Subcontractors will train employees when to wear PPE, the type of PPE that should be worn, and how to put it on and take it off.

Each affected employee must demonstrate an understanding of the training received and the ability to use PPE properly. When there is a reason to believe that any employee who has been trained does not have the required understanding and skill or there are changes in the workplace, the employee must be retrained.

Eye Protection

When exposed to facial or eye hazards from flying fragments, chemicals, acids or caustic liquids, melted metal, or chemical gases or vapors, employees must use the required eye or face protection. PPE used to protect the eyes and face must be in compliance with ANSI Standard Z87.1-2003 (Z87+), Occupational and Educational Personal Eye and Face Protective Devices.

Safety Glasses

- 1. While on company property, employees, subcontractors, and visitors must at all times wear safety glasses with side shields that meet ANSI Z-87.1-2003 standards with "high Impact lenses". Requirements as described below:
- 2. In shops and warehouses, and at field locations, except in striped safety zones that have been designated and approved.
- 3. In all yard work zones. Everyone in the vicinity of loading or unloading equipment. All employees who perform mechanic or maintenance work, operate equipment (e.g., forklift and welding), test stand operations, or do any work that may potentially cause an eye injury.
- 4. In a restroom, office, or any other building when performing work that may potentially cause an eye injury.
- 5. Provide with visitor glasses. If approved prescription safety glasses are not available for an individual, they must wear "Over the glass" type safety goggles or glasses over their regular prescription glasses until they obtain approved prescription safety glasses.
- 6. When assisting welders, employees must wear absorbent safety glasses to protect the assistant from ultra-violet (UV) and/or infrared rays (IR).
- 7. No employee is allowed to wear dark shaded lens (sunglasses) darker than # 1 shade unless welding or assisting a welder.
- 8. The requirement to wear safety eyewear will be exempt only based on a written "exceptions for medical reasons" from a doctor.
- 9. Employees are not required to wear safety glasses:
- 10. Inside an office.



11. In parking lots when traveling to and from vehicles, or office buildings using main doors that do not enter shops.

Goggles

- 1. When handling or mixing liquid chemicals, solvents, paints, etc., employees must wear chemical splash proof goggles as recommended on the Safety Data Sheet for the material being handled.
- 2. When blowing equipment down with air the employee must wear dust proof goggles. They must also be worn when the employee is performing a job task where safety glasses do not do an adequate job of preventing airborne particles from entering the openings around the lenses and side shields.

Face Shields

 When operating a hand held or immobile grinder with a wire or abrasive wheel the employee must wear a full face shield over safety glasses. The full face shield must also be used when chipping paint or concrete. Also, when performing job tasks where flying objects may potentially strike the face, if safety glasses or goggles do not provide adequate protection, the employee must wear a full face shield over safety glasses.

Head Protection

- When working in areas where a head injury is possible due to employee initiated impact, or impact from falling or other moving objects, employees must wear protective helmets. Helmets must be in compliance with ANSI Standard Z89.1-1997 Class E, American National Standard for Industrial Head Protection for Type II head protection, or must be equally effective.
- 2. Hardhats must be worn when working in areas where head injury is possible from falling objects.
- 3. Hardhats must be worn at all warehouse, field, and shop locations, or any location where it is determined to be necessary as per the location's PPE Hazard Assessment.
- 4. Never alter hardhats in any way.
- 5. Never paint or apply unauthorized stickers, name plates, etc. on hardhats.
- 6. Never drill, cut, bend, or apply heat to a hardhat.
- 7. Never alter the suspension system of a hardhat.
- 8. Employees must inspect hardhat regularly for chips, scratches, cracks, signs of heat exposure (sun cracks), etc.
- 9. Immediate replace any defective hardhats.
- 10. Never place a hardhat in the rear window of a vehicle (they will be exposed to the sun or may become a projectile in a vehicle accident).
- 11. Hardhats must be made available to visitors.
- 12. Provide hardhats.
- 13. Train employees in the use, care and maintenance of head protection equipment.

Hearing Protection

While in posted "High Noise" areas, all employees, subcontractors, and visitors must wear hearing protection.



All areas that are known, or suspected to have, noise levels in excess of 85 dBA (constantly or intermittently) must have warning signs posted.

When noise caused by machinery, tools, etc., prevents normal conversations to be clearly heard, employees shall wear hearing protection even if warning signs are not posted.

General rule of thumb: If you must yell to be heard, you require hearing protection. -

Types

- 1. Preformed Inserts (ear plugs)
- 2. Canal Caps (head band type)
- 3. Muff, either headband or hard hat mounted
- 4. Supply ear muffs and ear plugs employees in sizes and configurations that are comfortable for the employee.

Care and Maintenance

- 1. Employees must inspect hearing protection before each use.
- 2. Keep hearing protection clean to prevent ear infections.
- 3. Discard disposable ear plugs when they become dirty, greasy, or cracked.
- 4. Replace any ear muffs that have cracked seals, deteriorated foam inserts, or are defective.

Fit

- 1. Because everyone is different, hearing protection must be selected for the individual. The employee must try a variety of styles to find one that is comfortable and provides adequate protection.
- 2. Instruct employees in how to obtain the proper fit.

Hand Protection

Gloves

- 1. When performing work tasks that may expose the hands to extreme temperatures, cuts and abrasions, or exposure to chemicals, employees must wear gloves.
- 2. Welding: When performing arc welding or oxy/gas cutting, employees must wear welding gloves made of leather or other heat resistant materials.
- 3. Chemical: When handling chemicals that specify gloves as PPE, the employee must impervious (chemical resistant) gloves.
- 4. To select the correct glove type, refer to the specific chemical's Safety Data Sheet.
- 5. Employees who work with chemicals, i.e., solvent vats, will be issued their own gloves for hygienic purposes.
- 6. Leather: When working with sharp materials, or when handling rigging equipment, employees must wear leather gloves.
- 7. Cloth: When handling objects or materials that could cause blisters, splinters, cuts, etc., the employee must wear cloth gloves.
- 8. Heat Resistant: When handling hot bearings, races, or other materials or objects (heated beyond room temperature), employees must wear heat resistant gloves.



9. Insulated: To prevent frostbite in extreme cold climates, employees must wear insulated gloves.

Glove Inspections

- 1. Prior to each use, inspect gloves for holes, tears, and worn areas.
- 2. Periodically air test chemical gloves for pinholes by tightly twisting the cuff, expand the glove by applying low air pressure, and submersing the glove in water to check for bubbles.
- 3. Immediately discard any defective gloves.
- 4. Exception: While working with rotating machinery, machinists are exempt from wearing gloves.

Foot Protection

- 1. All employees with regular duties at field locations, in shops and warehouses must wear safety footwear.
- 2. Visitors and office workers entering these areas infrequently are not required to wear foot protection as long as they stay away from the work being performed.
- 3. If visitors or office workers must be in the close proximity to the work, the work must be stopped while in the area or safety footwear must be worn.
- 4. When in shops, warehouses, field locations and parts departments, employees must wear leather or equivalent boots (lace up or pull up).
- 5. Boots must provide ankle protection, and have must have soles that are designed to protect the feet from punctures, and must have defined heels for climbing ladders.
- 6. When job tasks there is a risk of equipment or material crushing the foot, toe guards must be worn.
- 7. Safety footwear must comply with ANSI Z41-1999 standards.
- 8. Some client locations may require everyone to wear safety footwear. Before visiting field locations, check with the local supervisor for client requirements.

Fall Protection

When performing certain elevated jobs (over six feet), employees must use personal fall protection. Refer to Fall Protection Program.

Electrical Protection

Refer to Electrical Safety Program.

Worksite Hazard Assessment

Hazard assessments must be performed, signed and documented. If it is determined that a hazard exists or is likely to exist, a PPE must be used. Following are some hazard sources that may be identified:

- 1. High or low temperatures
- 2. Chemical exposure (see SDS for guidance)
- 3. Flying fragments, melted metal or other face, eye, or skin hazards
- 4. Falling objects, or the possibility of dropping an object
- 5. Employee falling from a height in excess of 6'
- 6. Sharp objects



- 7. Rolling or pinching that could crush hands or feet
- 8. Electrical hazards

Anytime that these hazards may cause injury to employees, PPE must be selected to eliminate or substantially reduce the potential for injury. Employees will be notified for the selection and reason.

Each affected employee will be apprised of the results of this assessment, and a copy of the assessment will be kept at the local office.

Each affected employee must be fitted with the selected/identified PPE. The Training section of this program addresses fitting (including proper donning, and doffing), cleaning and maintenance of PPE. All PPE use exemptions must be supported by the PPE hazard assessment.

Monitoring

Site managers and supervisors must monitor worksite tasks to identify changes in hazards, or the introduction of new hazards. If the site manager or supervisor discovers a new hazard, they must advise the SAFETY Manager. The SAFETY Manager conducts a hazard assessment for appropriate PPE for the new hazard.

The SAFETY Manager monitors how effective the PPE Procedure is, and recommends improvements to management.

RESPIRATORY PROTECTION

Occasionally our work may necessitate the use of respirators to protect against air contaminants. Due to the limitations of respirators and their uncomfortable nature, the company will make every effort to provide other means of protection, such as local exhaust ventilation, or substitution of less hazardous material, prior to requiring employees to wear them.

When it is clearly impractical to remove harmful dusts, fumes, mists, vapors, or gases at their source, or where emergency protection against occasional and/or relatively brief exposure is needed, the company will provide, and the employee exposed to such hazard shall use, approved respiratory equipment.

Whenever respirators are required to be used to control harmful exposures, only respiratory equipment approved for that purpose shall be used and such equipment shall be approved by the National Institute for Occupational Safety and Health (NIOSH). Only parts approved for the specific respirator system shall be used for replacement.

General Respiratory Protection Guidelines:

- 1. Atmospheric contamination will be prevented wherever feasible through engineering controls such as enclosure or confinement of the operation, general and local exhaust ventilation, or substitution of less toxic materials. When effective engineering controls are not feasible, or while they are being instituted, appropriate respirators shall be used.
- 2. The company shall identify and evaluate the respiratory hazard(s) in the workplace; this evaluation shall include a reasonable estimate of employee exposures to respiratory



hazard(s) and an identification of the contaminant's chemical state and physical form. Where we cannot identify or reasonably estimate the employee exposure, the atmosphere shall be considered to be immediately dangerous to life or health (IDLH).

- 3. Respirators shall be provided when such equipment is necessary to protect the health of the employee.
- 4. Only NIOSH-certified respirators shall be used. The respirator shall be used in compliance with the conditions of its certification.
- 5. The company will provide respirators that are applicable and suitable for the purpose intended. We shall select and provide an appropriate respirator based on the respiratory hazard(s) to which the worker is exposed and workplace and user factors that affect respirator performance and reliability.
- 6. Respirators shall be selected from a sufficient number of respirator models and sizes so that the respirator is acceptable to, and correctly fits, the user.
- 7. The safety program administrator is qualified by appropriate training or experience that is commensurate with the complexity of the program to administer or oversee the respiratory protection program and conduct the required evaluations of program effectiveness.
- 8. The company will provide respirators, training, and medical evaluations at no cost to the employee.
- 9. The company will provide a medical evaluation to determine the employee's ability to use a respirator, before the employee is fit tested or required to use the respirator in the workplace. We may discontinue an employee's medical evaluations when the employee is no longer required to use a respirator.
- 10. The company will ensure that employees using a tight-fitting facepiece respirator pass an appropriate qualitative fit test (QLFT) or quantitative fit test (QNFT).
- 11. The company will establish and implement procedures for the proper use of respirators. These requirements include prohibiting conditions that may result in facepiece seal leakage, preventing employees from removing respirators in hazardous environments, taking actions to ensure continued effective respirator operation throughout the work shift, and establishing procedures for the use of respirators in IDLH atmospheres.
- 12. We shall provide each respirator user with a respirator that is clean, sanitary, and in good working order. The Supervisor or Manager shall ensure that respirators are cleaned and disinfected.
- 13. All filters, cartridges and canisters used in the workplace must be legibly labeled and colorcoded with the NIOSH approval label that must not be removed.
- 14. Training and information will be provided to employees who are required to use respirators. The training will be comprehensive, understandable, and recur annually, or more often if necessary.
- 15. The safety program administrator shall conduct evaluations of the workplace to ensure that the written respiratory protection program is being properly implemented, and to consult with employees to ensure that they are using the respirators properly.
- 16. Written information regarding medical evaluations, fit testing, and the respirator program shall be retained indefinitely. This information will facilitate employee involvement in the respirator program, assist us in auditing the adequacy of the program, and provide a record for compliance determinations by OSHA.



17. Where respirator use is not required by a particular standard or hazard, the company may provide respirators at the request of employees or permit employees to use their own respirators, if we determine that such respirator use will not in itself create a hazard. If voluntary respirator use is permissible, we shall provide the respirator users with the information contained in Appendix D of section 5144 8CCR. ("Information for Employees Using Respirators When Not Required Under the Standard.")

Respirator Selection Requirements

The proper respirator for the job and hazard shall be selected. This selection will be made in accordance with ANSI Z88.2-1980 standards. The correct respirator shall be specified for each job. The individual issuing them shall be adequately instructed to insure that the correct respirator is used.

The manufacturers' recommendations and literature will also be reviewed to determine if the respirator provides protection against the expected contaminants. For instance, dust masks do not provide protection against gasses or vapors.

The safety program administrator or another qualified individual shall review and approve all breathing air compressors and installations for compliance with appropriate OSHA regulations and safety procedures prior to use.

Respirators for IDLH atmospheres.

We shall provide the following respirators for employee use in IDLH atmospheres:

- 1. A full face piece pressure demand SCBA certified by NIOSH for a minimum service life of thirty minutes, or
- 2. A combination full face piece pressure demand supplied-air respirator (SAR) with auxiliary self-contained air supply.
- 3. Respirators provided only for escape from IDLH atmospheres shall be NIOSH-certified for escape from the atmosphere in which they will be used.
- 4. All oxygen-deficient atmospheres shall be considered IDLH.

Respirators for atmospheres that are not IDLH.

The company shall provide a respirator that is adequate to protect the health of the employee and ensure compliance with all other OSHA statutory and regulatory requirements, under routine and reasonably foreseeable emergency situations. The respirator selected shall be appropriate for the chemical state and physical form of the contaminant.

For protection against gases and vapors:

- 1. An atmosphere-supplying respirator, or
- 2. An air-purifying respirator, provided that the respirator is equipped with an end-of-servicelife indicator (ESLI) certified by NIOSH for the contaminant; or if there is no ESLI appropriate


for conditions in the workplace, we will implement a change schedule for canisters and cartridges that is based on objective information or data that will ensure that canisters and cartridges are changed before the end of their service life.

For protection against particulates:

- 1. An atmosphere-supplying respirator; or
- 2. An air-purifying respirator equipped with a filter certified by NIOSH under 30 CFR part 11 as a high efficiency particulate air (HEPA) filter, or an air-purifying respirator equipped with a filter certified for particulates by NIOSH under 42 CFR part 84; or
- 3. For contaminants consisting primarily of particles with mass median aerodynamic diameters (MMAD) of at least micrometers, an air-purifying respirator equipped with any filter certified for particulates by NIOSH.

Medical Evaluation Procedures

- 1. Employees shall not be assigned to tasks requiring the use of respirators unless it has been determined that they are physically able to perform the work while using the required respiratory equipment.
- 2. The company shall identify a physician or other licensed health care professional (PLHCP) to perform medical evaluations.
- 3. The medical evaluation shall include any medical tests, consultations, or diagnostic procedures that the PLHCP deems necessary to make a final determination.
- 4. Medical questionnaires and examinations shall be administered confidentially during the employee's normal working hours or at a time and place convenient to the employee.
- 5. The employee shall have an opportunity to discuss the examination results with the PLHCP.
- 6. The following information must be provided to the PLHCP before the PLHCP makes a recommendation concerning an employee's ability to use a respirator:
- 7. The type and weight of the respirator to be used by the employee;
- 8. The duration and frequency of respirator use (including use for rescue and escape);
- 9. The expected physical work effort;
- 10. Additional protective clothing and equipment to be worn; and
- 11. Temperature and humidity extremes that may be encountered.
- 12. The company shall provide the PLHCP with a copy of this written respiratory protection program and a copy of the OSHA regulations if they do not already have them.
- 13. In determining the employee's ability to use a respirator, the company shall obtain a written recommendation regarding the employee's ability to use the respirator from the PLHCP. The recommendation shall provide only the following information:
- 14. Any limitations on respirator use related to the medical condition of the employee, or relating to the workplace conditions in which the respirator will be used, including whether or not the employee is medically able to use the respirator;
- 15. The need, if any, for follow-up medical evaluations; and
- 16. A statement that the PLHCP has provided the employee with a copy of the PLHCP's written recommendation.
- 17. If the respirator is a negative pressure respirator and the PLHCP finds a medical condition that may place the employee's health at increased risk if the respirator is used, the company



shall provide a powered air purifying respirator (PAPR) if the PLHCP's medical evaluation finds that the employee can use such a respirator; if a subsequent medical evaluation finds that the employee is medically able to use a negative pressure respirator, then we are no longer required to provide a PAPR.

- 18. The company shall provide additional medical evaluations that comply with the requirements of this section if:
- 19. An employee reports medical signs or symptoms that are related to ability to use a respirator;
- 20. A PLHCP, supervisor, or the respirator program administrator informs the employer that an employee needs to be reevaluated;
- 21. Information from the respiratory protection program, including observations made during fit testing and program evaluation, indicates a need for employee reevaluation; or
- 22. A change occurs in workplace conditions (e.g., physical work effort, protective clothing, temperature) that may result in a substantial increase in the physiological burden placed on an employee.

Fit Testing

- 1. The company shall ensure that an employee using a tight-fitting face piece respirator is fit tested prior to initial use of the respirator, whenever a different respirator face piece (size, style, model or make) is used, and at least annually thereafter.
- 2. We shall conduct an additional fit test whenever the employee reports, or the employer, PLHCP, supervisor, or program administrator makes visual observations of, changes in the employee's physical condition that could affect respirator fit. Such conditions include, but are not limited to, facial scarring, dental changes, cosmetic surgery, or an obvious change in body weight.
- 3. If after passing a QLFT or QNFT, the employee subsequently notifies the program administrator, supervisor, or PLHCP that the fit of the respirator is unacceptable, the employee shall be given a reasonable opportunity to select a different respirator face piece and to be retested.
- 4. The fit test shall be administered using an OSHA-accepted QLFT or QNFT protocol.

Usage Rules

- 1. The company shall not permit respirators with tight-fitting face pieces to be worn by employees who have:
- 2. Facial hair that comes between the sealing surface of the face piece and the face or that interferes with valve function; or
- 3. Any condition that interferes with the face-to-face piece seal or valve function.
- 4. If an employee wears corrective glasses or goggles or other personal protective equipment, we shall ensure that such equipment is worn in a manner that does not interfere with the seal of the face piece to the face of the user.
- 5. For all tight-fitting respirators, we shall ensure that employees perform a user seal check each time they put on the respirator.
- 6. Appropriate surveillance shall be maintained of work area conditions and degree of employee exposure or stress. When there is a change in work area conditions or degree of



employee exposure or stress that may affect respirator effectiveness, we shall reevaluate the continued effectiveness of the respirator.

- 7. Respiratory equipment shall not be passed on from one person to another until it has been cleaned and sanitized. Respirators individually assigned should be marked to indicate to whom it was assigned. This mark shall not affect the respirator performance in any way. The date of issuance should be recorded.
- 8. When not in use, respirators shall be stored to protect against dust, sunlight, extreme temperatures, excessive moisture, or damaging chemicals. Plastic zip lock bags are suitable for storage.
- 9. The company shall ensure that employees leave the respirator use area:
- 10. To wash their faces and respirator facepieces as necessary to prevent eye or skin irritation associated with respirator use; or
- 11. If they detect vapor or gas breakthrough, changes in breathing resistance, or leakage of the facepiece; or
- 12. To replace the respirator or the filter, cartridge, or canister elements.
- 13. If the employee detects vapor or gas breakthrough, changes in breathing resistance, or leakage of the facepiece, we will replace or repair the respirator before allowing the employee to return to the work area.
- 14. For all IDLH atmospheres, the company shall ensure that:
- 15. One employee or, when needed, more than one employee is located outside the IDLH atmosphere;
- 16. Visual, voice, or signal line communication is maintained between the employee(s) in the IDLH atmosphere and the employee(s) located outside the IDLH atmosphere;
- 17. The employee(s) located outside the IDLH atmosphere are trained and equipped to provide effective emergency rescue;
- 18. The Supervisor or designee is notified before the employee(s) located outside the IDLH atmosphere to provide emergency rescue;
- 19. The Supervisor or designee authorized to do so by the company, once notified, provides necessary assistance appropriate to the situation;
- 20. Employee(s) located outside the IDLH atmospheres are equipped with pressure demand or other positive pressure SCBAs, or a pressure demand or other positive pressure supplied-air respirator with auxiliary SCBA; and either appropriate retrieval equipment for removing the employee(s) who enter(s) these hazardous atmospheres where retrieval equipment would contribute to the rescue of the employee(s) and would not increase the overall risk resulting from entry; or equivalent means for rescue where retrieval equipment is not required.

Maintenance, Inspection and Care of Respirators

- 1. The company shall ensure that respirators are cleaned and disinfected using procedures recommended by the respirator manufacturer, provided that such procedures are of equivalent effectiveness to OSHA regulations. The respirators shall be cleaned and disinfected at the following intervals:
- 2. Respirators issued for the exclusive use of an employee shall be cleaned and disinfected as often as necessary to be maintained in a sanitary condition;



- 3. Respirators issued to more than one employee shall be cleaned and disinfected before being worn by different individuals;
- 4. Respirators maintained for emergency use shall be cleaned and disinfected after each use; and
- 5. Respirators used in fit testing and training shall be cleaned and disinfected after each use.
- 6. All respirators shall be stored to protect them from damage, contamination, dust, sunlight, extreme temperatures, excessive moisture, and damaging chemicals, and they shall be packed or stored to prevent deformation of the face piece and exhalation valve.
- 7. Emergency respirators shall be:
- 8. Kept accessible to the work area;
- 9. Stored in compartments or in covers that are clearly marked as containing emergency respirators; and
- 10. Stored in accordance with any applicable manufacturer instructions.
- 11. All respirators used in routine situations shall be inspected before each use and during cleaning;
- 12. All respirators maintained for use in emergency situations shall be inspected at least monthly and in accordance with the manufacturer's recommendations, and shall be checked for proper function before and after each use; and
- 13. Emergency escape-only respirators shall be inspected before being carried into the workplace for use.
- 14. The company shall ensure that respirator inspections include the following:
- 15. A check of respirator function, tightness of connections, and the condition of the various parts including, but not limited to, the face piece, head straps, valves, connecting tube, and cartridges, canisters or filters; and
- 16. A check of elastomeric parts for pliability and signs of deterioration.
- 17. In addition to the requirements above, self-contained breathing apparatus shall be inspected monthly.
- 18. Air and oxygen cylinders shall be maintained in a fully charged state and shall be recharged when the pressure falls to 90% of the manufacturer's recommended pressure level. The employer shall determine that the regulator and warning devices function properly.
- 19. For respirators maintained for emergency use, the company shall:
- 20. Certify the respirator by documenting the date the inspection was performed, the name (or signature) of the person who made the inspection, the findings, required remedial action, and a serial number or other means of identifying the inspected respirator; and
- 21. Provide this information on a tag or label that is attached to the storage compartment for the respirator, is kept with the respirator, or is included in inspection reports stored as paper or electronic files. This information shall be maintained until replaced following a subsequent certification.
- 22. Repairs. The company shall ensure that respirators that fail an inspection or are otherwise found to be defective are removed from service, and are discarded or repaired or adjusted in accordance with the following procedures:
- 23. Repairs or adjustments to respirators are to be made only by persons appropriately trained to perform such operations and shall use only the respirator manufacturer's NIOSH-approved parts designed for the respirator;



- 24. Repairs shall be made according to the manufacturer's recommendations and specifications for the type and extent of repairs to be performed; and
- 25. Reducing and admission valves, regulators, and alarms shall be adjusted or repaired only by the manufacturer or a technician trained by the manufacturer.

Training

- 1. The company shall ensure that each employee required to use a respirator can demonstrate knowledge of at least the following:
- 2. Why the respirator is necessary and how improper fit, usage, or maintenance can compromise the protective effect of the respirator;
- 3. What the limitations and capabilities of the respirator are;
- 4. How to use the respirator effectively in emergency situations, including situations in which the respirator malfunctions;
- 5. How to inspect, put on and remove, use, and check the seals of the respirator;
- 6. What the procedures are for maintenance and storage of the respirator;
- 7. How to recognize medical signs and symptoms that may limit or prevent the effective use of respirators; and
- 8. The training shall be conducted in a manner that is understandable to the employee.
- 9. The training shall be provided prior to requiring the employee to use a respirator in the workplace.
- 10. Retraining shall be administered annually, and when the following situations occur:
- 11. Changes in the workplace or the type of respirator render previous training obsolete;
- 12. Inadequacies in the employee's knowledge or use of the respirator indicate that the employee has not retained the requisite understanding or skill; or
- 13. Any other situation arises in which retraining appears necessary to ensure safe respirator use.

Program Evaluation

- 1. The safety program administrator shall conduct evaluations of the workplace as necessary to ensure that the provisions of the current written program are being effectively implemented and that it continues to be effective.
- The safety program administrator shall regularly consult employees required to use respirators to assess the employees' views on program effectiveness and to identify any problems. Any problems that are identified during this assessment shall be corrected. Factors to be assessed include, but are not limited to:
- 3. Respirator fit (including the ability to use the respirator without interfering with effective workplace performance);
- 4. Appropriate respirator selection for the hazards to which the employee is exposed;
- 5. Proper respirator use under the workplace conditions the employee encounters; and
- 6. Proper respirator maintenance.

Recordkeeping

1. Records of medical evaluations must be retained and made available to regulatory agencies.



- 2. The company shall establish a record of the qualitative and quantitative fit tests administered to an employee including:
- 3. The name or identification of the employee tested;
- 4. Type of fit test performed;
- 5. Specific make, model, style, and size of respirator tested;
- 6. Date of test; and
- 7. The pass/fail results for QLFTs or the fit factor and strip chart recording or other recording of the test results for QNFTs.
- 8. Fit test records shall be retained for respirator users until the next fit test is administered.
- 9. Program records shall be made available upon request to affected employees and to governing or regulatory agencies for examination and copying.

Procedures for Cleaning Respirators

- 1. Remove filters, cartridges, or canisters. Disassemble face pieces by removing speaking diaphragms, demand and pressure-demand valve assemblies, hoses, or any components recommended by the manufacturer. Discard and replace any defective parts.
- 2. Wash components in warm (43 deg. C [110 deg. F] maximum) water with a mild detergent or with a cleaner recommended by the manufacturer. A stiff bristle (not wire) brush may be used to facilitate the removal of dirt.
- 3. Rinse components thoroughly in clean, warm (43 deg. C [110 deg. F] maximum), preferably running water. Drain.
- 4. When the cleaner used does not contain a disinfecting agent, respirator components should be immersed for two minutes in one of the following:
- 5. Hypochlorite solution (50 ppm of chlorine) made by adding approximately one milliliter of laundry bleach to one liter of water at 43 deg. C (110 deg. F); or,
- 6. Aqueous solution of iodine (50 ppm iodine) made by adding approximately 0.8 milliliters of tincture of iodine (6-8 grams ammonium and/or potassium iodide/100 cc of 45% alcohol) to one liter of water at 43 deg. C (110 deg. F); or,
- 7. Other commercially available cleansers of equivalent disinfectant quality when used as directed, if their use is recommended or approved by the respirator manufacturer.
- 8. Rinse components thoroughly in clean, warm (43 deg. C [110 deg. F] maximum), preferably running water. Drain. The importance of thorough rinsing cannot be overemphasized. Detergents or disinfectants that dry on face pieces may result in dermatitis. In addition, some disinfectants may cause deterioration of rubber or corrosion of metal parts if not completely removed.
- 9. Components should be hand-dried with a clean lint-free cloth or air-dried.
- 10. Reassemble face piece, replacing filters, cartridges, and canisters where necessary.
- 11. Test the respirator to ensure that all components work properly.

Mandatory Information for Employees Using Respirators When Not Required

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 hazardous 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, certifies respirators. A label or statement of certification should appear on the respirator or 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 against. For example, a respirator designed to filter dust particles will not protect you against gases, vapors, or very small solid particles of fumes or smoke.

Keep track of your respirator so that you do not mistakenly use someone else's respirator.

SUBCONTRACTOR MANAGEMENT PLAN

Purpose

The purpose of this program is to continue to better subcontractor health, safety and environmental achievement and to create a standard for pre-qualification, assessment/selection and improvement of our subcontractors.

General Requirements

Manage all subcontractors according to this program.

Must pre-approve the use of subcontractors. Requirements for this approval include:

- 1. Your company safety department performs a formal safety review of the subcontractor.
- 2. The scope of this safety review was appropriate based on the hazards and risk exposure.
- 3. The subcontractor is (or will be) trained in company's safety policies, expectations and requirements.
- 4. The subcontractor consents that they will follow company's Drug and Alcohol policy and onsite safety rules through the work term.

Do not use any subcontractor with a "Non-Approved" safety status any job site.

Procedure

Pre-Qualification of Subcontractors

Company will review the subcontractor's safety programs, safety training documents and safety statistics to pre-qualify them.

How Acceptable Safety Metrics Will be Used as a Criteria for Selecting Subcontractors



Subcontractors will be pre-qualified using a criteria of safety metrics. The metrics and scoring considers:

- 1. A review of responses to Subcontractor Safety Pre-Qualification Form and subcontractor safety program documents 60% (Rated from 0-60 total points)
- 2. A review of subcontractor safety training documents -0% (Rated from 0-20 total points)
- 3. A review of subcontractor safety statistics (ie TRIR, EMR, DART, Fatality Rate -0% (Rated from 0-20 total points)
- 4. Evaluation Rating and Acceptance
- 5. The rating system of subcontractors has five designations:
- 6. 90 points or greater = A no restrictions.
- 7. 85 to 89 points = B A documented mitigation plan must be approved by company Safety.
- 8. 81 to 84 points = C A documented mitigation plan must be approved by company Safety; requires written management approval.
- 9. 71 to 80 points = D Must have a commitment meeting with subcontractor senior management present; documented mitigation plan must be approved by company.
- 10. Safety; requires written management approval; regardless of number of workers, trained subcontractor safety personnel must on site during work.
- 11. 70 points or less = F do not use.

After evaluating and scoring subcontractors, company safety provides the scores/ranking to management.

If the subcontractor does not progress sufficiently towards an acceptable mitigation plan (or other agreed upon criteria), company has the right to change their status to "Non-Approved". Subcontractor Involvement

While performing work at worksites, subcontractors must follow the work practices and systems described below:

- 1. Prior to beginning any work, attend a safety orientation, pre-job or kick-off meeting provided by company
- 2. Observe employees for signs of substance abuse, reporting nonconformities to general contractor
- 3. Ensure employees are adequately trained and competent to their work
- 4. Take part in tailgate safety meetings, hazard assessments or job safety analysis and worksite safety inspections.
- 5. Conduct a pre-job safety inspection including equipment
- 6. Take part in the Behavior Based Safety hazard reporting system
- 7. Report any spills, injuries, property damage incidents, as well as any near misses
- 8. Follow worksite and Owner Client safety rules
- 9. Utilize applicable safety practices and processes
- 10. After the job is complete, clean up and restore the worksite
- 11. Always comply with regulations
- 12. Will conduct post job safety performance reviews for subcontractors.



CODE OF SAFE PRACTICES RECEIPT

This is to certify that I have received a copy of the Code of Safe Practices. I have read these instructions, understand them, and will comply with them while working for the company.

I understand that failure to abide by these rules may result in disciplinary action and possible termination of my employment with the company.

I also understand that I am to report any injury to my Supervisor or Manager immediately and report all safety hazards.

I further understand that I have the following rights.

I am not required to work in any area I feel is not safe.

I am entitled to information on any hazardous material or chemical I am exposed to while working. I am entitled to see a copy of the Safety Manual and Injury and Illness Prevention Program. I will not be discriminated against for reporting safety concerns.

Print Name

Sign Name

Date