

Proven Ability & Exceptional Service

Illness and Injury Prevention Program

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Erwin Electric

SAFETY POLICY OVERVIEW

Erwin Electric Safety Policy Letter

The management of this organization is committed to providing employees with a safe and healthful workplace. It is the policy of this organization that all employees are required to abide by all policies, rules and procedures detailed in this manual. Employees must also report all accidents, injuries, and unsafe conditions to their supervisors. No such report will result in retaliation, penalty, or other disincentive.

Employee recommendations to improve safety and health conditions are encouraged and training will be provided to ensure that employees fully understand and are able to fully comply with the requirements of our safety program. Management will give true attention to and provide the financial resources for the correction of unsafe conditions. Management will promote and influence safe behavior. This will be accomplished by both positive reinforcement of correct and safe activity, and by disciplinary action for those who willfully or repeatedly work in an unsafe manner.

Disciplinary action will take the form of

- 1) Written warning or,
- 2) Written warning and suspension without pay or,
- 3) Termination of employment.

Management reserves the right to terminate the employment of any employee at any time for violation of company policies.

Management will participate in establishing and maintaining an effective safety program. This will include the following:

- Holding all management and supervisory staff accountable for their safety responsibilities in their respective departments, jobs, crews or workplaces;
- Providing safety and health education and training as needed; and
- Reviewing and updating workplace safety policies, practices and performances.

This policy statement serves to express this company's commitment to and involvement in providing our employees a safe and healthy workplace. This workplace safety and health program will be incorporated as the standard of practice for this organization. Compliance with these safe practices and those of any regulatory agency will be required of all employees as a condition of continued employment.

Erwin Electric Safety Overview / Outline

Responsibilities

Senior Managers / Managers

- Ensure that safety is adequately budgeted for the department, job, etc.
- Communicate safe work practices regularly within the department.
- Attend departmental and company-wide safety meetings.
- Formally recognize outstanding safety performance by any/all personnel.
- Assist the Supervisor/Superintendent or any other personnel with the safety process as needed or as requested. This can include formal worksite periodic inspections.
- Uphold and enforce all known safe work practices.

Supervisors / Superintendents

- Ensure new-hire orientation is given to new employees, or is followed up at the work level
- Ensure employees are given training that includes safe work practices on equipment, tools, machines, processes, etc.
- Personally conduct--or designate qualified personnel to conduct-- regular inspections of the workplace
- Conduct frequent (daily) work discussions prior to the start of work that include safe work practices
- Uphold and enforce safe work practices. This includes influencing safe behavior by positive reinforcement such as recognition of worker's safe work performance, and/or monetary or gift awards for safe behavior. Enforcement action can also influence safe behavior when applied towards workers who blatantly perform unsafe acts, or who continually perform in an unsafe manner
- Investigate all incidents and take immediate corrective action to prevent re-occurrence
- Provide safety meetings on a regular basis and require attendance of all workers

All Employees

- Are to follow safe work practices, and if they are unsure of what is the correct/safe way to perform a task or a job, they are to ask their foreman, supervisor or manager
- Must immediately report all unsafe equipment or tools to their foreman, supervisor or manager. This includes reporting unsafe behavior of other workers, if these workers are approached and remain unwilling to correct their unsafe actions or conditions.
- Are to uphold the safe work practices this company has established
- If injured on the job, or become ill, immediately inform their supervisor, foreman or manager

WORKSITE ANALYSIS

- All work areas, departments, and jobs need to be inspected on a regular basis to ensure safe work practices and safe and healthy conditions. For the most part, these inspections are to be conducted by the Supervisor/Superintendent or his/her qualified and designated worker. Each inspection may not be required to be formal (written) although regular written completed inspections will be expected.
- This includes the purchase of new equipment or tools, or the re-working or retrofitting of workstations or equipment so as to ensure that safety and health is considered.

- This can include the assessment of a workstation or process that may need to be fitted to the worker (ergonomics) so as to avoid injury or illness.
- If approached by workers who appear to have a true concern regarding a safety or health issue, supervisors or managers need to act accordingly and give attention to the matter.
- All incidents (this includes property damage, equipment damage, incidents involving injury or illnesses, and near-miss type incidents) need to be investigated. In most cases, the department, job foreman or supervisor will complete this investigation. Managers will be involved as necessary or when requested.
- Incidents that involve injury and illnesses will be evaluated and analyzed for trends, common causes, and patterns so as to prevent further incidents.

HAZARD PREVENTION AND CONTROL

- If feasible, engineering controls will be used first, rather than immediately providing personal protection equipment (PPE).
- Safe work practices will be developed, and employees will be trained on using these safe work practices to avoid injury and illnesses. This may include the implementation of task or job hazard analyses.
- PPE will be provided as necessary, and its use enforced by Supervisory and Management staff.
- If feasible, administrative controls, such as reducing the duration of exposure can be implemented.
- Equipment, tools, machines, trucks, vehicles, and structures/facilities etc., need to be maintained in good working order by a continued preventative maintenance process.
- All workers will be made aware of workplace emergency procedures. Training on this process will begin at orientation. Drills will be conducted periodically to assist in making all workers aware of the procedures in the event of an emergency such as fire or explosion.

SAFETY AND HEALTH TRAINING

Safety and Health Orientation

Workplace safety and health orientation begins on the first day of initial employment or job transfer. Each employee should have access to a copy of the written safety program, through his or her supervisor, for review and future reference, and will be given a personal copy of any safe work practices, policies, and procedures pertaining to his / her job. Supervisors should question employees and should answer employees' questions to ensure knowledge and understanding of safe work practices, policies, and job-specific procedures. Supervisors are responsible to inform all employees that compliance with the safe work practices is required.

Job-Specific Training

- Managers, Supervisors and Foremen should receive basic safety and health training as it relates to their positions
- Supervisors will initially train employees on how to perform assigned job tasks safely.
- Supervisors will carefully review with each employee any specific safe work practices, policies, and procedures that are applicable.
- Supervisors will observe employees performing the work. If necessary, the supervisor will provide a demonstration using safe work practices, or remedial instruction to correct training deficiencies before an employee is permitted to do the work without supervision.

- All employees will receive safe operating instructions on seldom-used or new equipment before using the equipment.
- Supervisors will review safe work practices with employees before permitting the performance of new, non-routine, or specialized procedures.

Periodic Retraining of Employees

All employees will be retrained periodically on safe work practices, policies and procedures, and when changes are made to the written safety program.

If necessary, individual employees will be retrained after the occurrence of a work-related injury caused by an unsafe act or work practice, or when a supervisor observes employees displaying unsafe acts, practices, or behaviors.

FIRST AID AND MEDICAL ASSISTANCE

There will be adequate first aid supplies and /or an adequate first aid kit available at each workplace. Where required, or in the case of an emergency where the workplace is located in a remote location and emergency medical assistance can not arrive within a few minutes, there will be a designated certified first aid (and possibly CPR) trained employee who can assist in first aid emergency cases. Employees who receive work related injuries or illnesses will be given immediate attention in regards to the nature of their injury or illness.

First aid is the immediate and temporary care of a victim of an accident or illness until the services of a physician can be obtained. Since first aid is immediate and temporary care only, it is the responsibility of the person administering first aid to provide temporary and usually minimal emergency treatment.

The following pages will attempt to help show the person administering first aid the things that can be done for various types of injuries.

SEVERE BLEEDING: Treatment for severe bleeding is by pressing directly on the wounded area with a clean cloth. Usually the kind of bleeding that we run into in our trades will stop with a simple pressure treatment. If there is more severe bleeding, either call for professional help or transport the victim to the nearest hospital.

EYE INJURY: Often foreign objects in the eye present a minor irritation, with no real injury. However, the victim can produce a more serious injury by rubbing the eye. It is recommended that when there is a foreign object in the eye, a large amount of water should be used to flush the eye, allowing the water to flow across the surface of the eye. If the object penetrates the eyeball, make no attempt to remove the object or even wash the eye any further. Either call an ambulance or transport the victim to the nearest medical facility.

FRACTURES: Slips and falls can produce bone fractures. There are two types: simple and compound. A compound fracture is when the end of a broken bone penetrates the skin of the victim. A simple fracture is one that although the bone is broken, does not penetrate the skin.

Immobilization of the injured limb is of primary importance, for either type of fracture. A compound fracture is easy to spot, and the victim should be transported to the nearest medical facility immediately. A simple fracture is not so easy to determine for the amateur, however there are some symptoms that may occur. Pain may start at any time after the

bone is broken. Swelling of the area may or may not occur and the limb may appear to be deformed.

Treat all suspect injuries of this nature as a fracture. The limb should be immobilized, and the victim transported to the nearest medical facility.

A fracture victim may or may not go into shock; however, the basic first aid treatment in such an instance would be to conserve body heat of the victim.

BURNS: Wear protective clothing. This will aid in combating burns. However, if an employee is burned, the application of cold water, which should be available on the jobsite or the office, should be instituted immediately. Continue to apply water while waiting for an ambulance. The ambulance crew will take over and will transport the victim to the nearest medical facility. Burns of any severity should be treated by a physician.

HEAT STROKE-HEAT EXHAUSTION: Heat exhaustion can be prevented by sufficient intake of proper liquids that will replace the fluids lost through heavy perspiration. Water or one of the many brands of liquids that replenish fluids is recommended. Coffee, soft drinks, and alcohol will not replace the right kinds of chemicals and should not be taken. If a person is suffering from heat exhaustion, get the victim to a cool spot, on the ground out of the sun, or preferably into an air-conditioned building. The prime first aid treatment for a victim of heat exhaustion is to cool them off. The victim will have a weak pulse with a slightly higher than normal body temperature. The victim should be taken to the nearest medical facility as soon as possible.

Heat stroke is a more severe condition. The symptoms are a weak pulse, rapid heartbeat with dry skin (as opposed to clammy). The first aid for the victim of a heat stroke is to move the victim to a cooler spot. If he or she has lost consciousness, elevate the head and use whatever methods are available to reduce his or her body temperature. Call for help immediately and have the victim transported to the nearest medical facility.

SPINAL CORD INJURIES: Falls can cause spinal cord injuries. Consider any fall victim a spinal cord injury victim. DO NOT move the victim. Immediately call an ambulance. While waiting for the ambulance, check for bleeding on any body parts and treat as mentioned above.

Erwin Electric

SAFETY PREVENTION PLAN

Additional Safety and Health Work Practices and Procedures, Including Hazard Communication

REQUIRED SAFETY WORK PRACTICES AND PROCEDURES

These safety work practices and procedures are developed to assist in achieving job safety by having no employee accidents. Some of these are OSHA requirements. For these reasons, every employee is expected to abide by our safety work practices and procedures at all times.

Hard Hats –All employees are **REQUIRED** to wear a hard hat on every construction job site.

Eye Protection - All employees are **REQUIRED** to wear safety glasses on every construction job site.

Fall Protection – All employees exposed to falls over 6ft are required to be trained and use proper fall protection equipment and/or be protected by adequate guardrail systems or adequate safety nets.

Hand Protection - All employees involved in operations exposing hands to cuts, chemicals, burns, etc. are required to wear gloves that are appropriate to the exposure. The material safety data sheet (MSDS) should be used if in doubt about what type of glove to use.

Other - Specific jobs may cause the need for other personal protective equipment. When this occurs, the employee is expected to utilize this equipment. It is the Job Superintendent's responsibility to see that equipment in use be appropriate and in good condition.

GENERAL:

Employees must follow the safety policy, safe work practices and procedures established by Erwin Electric Inc. Violations may result in disciplinary action, as described in the Safety Policy section.

Employees should report any equipment or condition considered to be unsafe, as well as what they consider to be unsafe work practices. This type of information should be reported to the Superintendent or to the person in charge of the job.

Be courteous. Avoid distracting others as distractions may cause or contribute to accidents. Do not engage in horseplay on the job.

When in doubt about the safety of a situation that is out of the norm, contact the Superintendent to find the proper procedure.

General Rules

Heat Exhaustion/Sun Exposure

1. Keep your shirt on to avoid dehydration and sunburn.
2. Drink plenty of clear liquids during your breaks.
3. Take breaks in shaded areas.

Work Area Protection

1. Place signs (lights) well before the work area to permit oncoming motorists time to react.
2. Erect protective barriers or guards and warning signs prior to removing manhole covers or making excavations where accessible by vehicular or pedestrian traffic.
3. Position the work vehicle to guard the work area while work is in progress.
4. Good housekeeping practices improve safety for everyone. When you create clutter, clean it up. When clutter is left in the work area by someone else, clean it up and report this to the Superintendent.

Personal Protective Equipment

1. HEAD PROTECTION / HARDHATS:

All employees are required to wear a hard hat on every construction job site where there is a possible danger of head injury from impact, or from falling or flying objects, or from electrical shock and burns. This includes:

- All Commercial Jobsites
- All Residential Jobsites During Rough-In Stage
- All Jobsites where scaffolding is present
- All Jobsites where work is being done overhead
- While working on or near exposed energized parts
- Any Jobsite deemed "Hardhat Site"

Note: Do not wear hard hats that are dented or cracked.

2. EYE PROTECTION / SAFETY GLASSES

All employees are always required to wear safety glasses on every construction job site. Safety glasses are intended to shield the wearer's eyes from impact hazards such as flying fragments, objects, large chips, and particles. Workers are required to use eye safety glasses with side shields when there is a hazard from flying objects. Non-side shield spectacles are not acceptable eye protection for impact hazards.

Do not continue to work if safety glasses become fogged. Stop work and clean the glasses until the lenses are clear and defogged.

3. **HEARING PROTECTION / EAR PLUGS:**

Employees must wear ear plugs when exposed to noise from loud tools such as air nailers, saws, and drills. If it is necessary for you to speak in a very loud voice, or shout directly into the ear of a person to be understood, it is likely that the noise level is high enough to require hearing protection

4. **HAND PROTECTION / GLOVES**

Gloves must be worn whenever your hands are at risk of lacerations, abrasions, chafing or punctures. Make sure they cover hands completely with a snug, but not uncomfortable, fit. This includes:

- Digging / Excavation
- Working with sharp or rough material
- Working with pulling rope

5. **ARC RATED PPE**

In general, Erwin Electric Employees are not permitted to work on energized electrical equipment. In the RARE circumstance where employees have been given supervisor permission to work on Energized Electrical Equipment and an Energized Electrical Work Permit has been completed, the following PPE will be made available:

- Hardhat with Arc Rated Face Shield
- Arc Rated Suit consisting of Jacket, Coveralls, or Full Body Suit
- Safety Glasses
- Arc Rated Gloves
- Class 0 Rubber Lineman's Gloves with leather protectors
- Hearing Protection (ear plugs)

Refer to the Energized Electrical Work Policy on page 17 for more information.

Lifting Heavy Objects

OSHA suggested engineering controls implement physical change to the workplace, which eliminates/reduces the hazard on the job/task.

1. Stand close to the load with your feet spread shoulder width apart. One foot should be slightly in front of the other for balance.
2. Squat down, bending at the knees (not your waist). Tuck your chin while keeping your back as vertical as possible.
3. Get a firm grasp of the object before beginning the lift.
4. Slowly begin straightening your legs, lifting slowly. Never twist your body during this step.

5. Once the lift is complete, keep the object as close to the body as possible. If the load's center of gravity moves away from your body, there is a dramatic increase in stress to the lumbar region of the back.

Using proper lifting techniques can help prevent downtime due to avoidable back injuries. With a little practice, precautionary methods such as these can become good daily habits that could help prevent back injuries both on and off the job. Remember, no approach will completely eliminate back injuries. However, a substantial portion can be prevented by incorporating effective administrative and engineering controls.

Electrically Powered Tools

6. Do not use power equipment or tools on which you have not been trained.
7. Keep power cords away from the path of drills, saws, vacuum cleaners, floor polishers, mowers, slicers, knives, grinders, irons and presses.
8. Do not use cords that have splices, exposed wires, or cracked or frayed ends.
9. Do not carry plugged-in equipment or tools with your finger on the switch.
10. Do not carry equipment or tools by the cord.
11. Disconnect the tool from the outlet by pulling on the plug, not the cord.
12. Turn the power switch of the tool to "Off" before plugging or unplugging it.
13. Do not leave tools that are "On" unattended.
14. Do not handle or operate electrical tools when your hands are wet or when you are standing on wet floors.
15. Do not operate spark-inducing tools such as grinders, drills or saws near containers labeled "Flammable" nor in an explosive atmosphere such as a paint spray booth.
16. Turn the power switch of electrical tools to "Off" and then unplug from the outlet before attempting repairs or service work. Tag the tool "Out of Service."
17. Do not use extension cords or other three-pronged power cords that have a missing prong.
18. Do not remove the ground prong from electrical cords.
19. Do not use an adapter such as a cheater plug that eliminates the ground.
20. Do not plug multiple electrical cords into a single outlet.
21. Do not run extension cords through doorways, through holes in ceilings, walls or floors.
22. Do not drive over, drag, step on or place objects on a cord.
23. Do not stand in water or on wet surfaces when operating power hand tools, or portable electrical appliances.
24. Do not use a power hand tool to cut wet or water-soaked building materials or to repair pipe leaks.
25. Do not use a power hand tool while wearing wet cotton gloves or wet leather gloves.
26. Never operate electrical equipment barefooted. Wear rubber-soled or insulated work boots.
27. Do not operate a power hand tool or portable appliance that has a frayed, worn, cut, improperly spliced or damaged power cord.
28. 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.
29. Do not operate a power hand tool or portable appliance that has a two-pronged adapter or a two-conductor extension cord.

30. 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.

Power Saws

1. Wear safety goggles, 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. Remove all nails from the stock before using the power saw to cut the stock.
6. Do not make measurements to the stock while the power saw is running. Make the measurements before turning the power switch to the “On” position.
7. Keep your hands away from the exposed blade.
8. Never let your hand, finger or thumb cross the cutting line.
9. When using the power saw, do not hold the work piece against your body when making the cut.
10. Operate the saw at full cutting speed.
11. Do not alter the anti-kickback device or blade guard.
12. Do not perform cutting operations with the power saw while standing on a wet or slippery floor.
13. When using the power saw, do not reach across the cutting operation.
14. Cut away from your body and below your shoulder level when using a power saw.
15. Use the pusher stick to guide materials through the power saw when cutting short stock.
16. Turn the power switch of the saw to the “Off” position and allow the blade to stop before attempting to pull out an incomplete cut.
17. Do not feed the material faster than the power saw can cut it.

Machine and Equipment Safety

1. Replace the guards before starting machines, or after adjusting 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 in the machine shop.
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.

Lockout/Tagout

1. Notify all affected employees of the impending lockout situation, the reason for it, and estimated start and duration times.
2. Place the breaker or switch in the “Off” or “Safe” position.

3. Lockout and tagout all inline points of control. In most cases, this may be more than one place or more than one lock if several people are working on the equipment.
4. Lockout verification:
 - a. Verify the locked-out switch or control cannot be overridden.
 - b. Test the equipment to be certain the locked-out switch is de-energized and not simply malfunctioning.
 - c. Press all start buttons to see if the equipment starts.
 - d. Ensure the system you will be working on is the same one that has been locked out.
5. All locks and tags are to be left in place until work is completely finished. A lock is never to be removed except by the person who placed it there. Only immediate supervisors are to authorize emergency removal of a lock or tag.
6. Before restarting the equipment, verify the following:
 - a. All tools and other items have been removed.
 - b. All machine guards are in place.
 - c. All electric systems are reconnected.
 - d. All employees are clear of equipment.

Portable Welding/Soldering Operations

1. Do not use personal or employee-owned power tools and portable appliances at work.
2. Do not perform welding tasks while wearing wet cotton gloves or wet leather gloves.
3. Use the insulated work gloves when using welding equipment.
4. Do not use the welding apparatus if the power cord is cut, frayed, split or otherwise visibly damaged or modified.
5. When replacing power plugs and cords of the welding apparatus, always check to ensure the ground wire is connected and the notches on the power plug prongs are not worn off, allowing the plug to be inserted backward.

Hand Tool Safety

1. Do not continue to work if your safety glasses become fogged. Stop work and clean the glasses until the lenses are clear and defogged.
2. Use tied-off containers to keep tools from falling off scaffolds and other elevated work platforms.
3. Carry all sharp tools in a sheath or holster.
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. When using knives, shears or other cutting tools, cut in a direction away from your body.
9. Do not chop at heights above your head when you are working with a hand axe.
10. 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.
11. Do not perform “make-shift” repairs to tools.
12. Do not use “cheaters” on load binders or “boomers.”

13. 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.
14. Do not throw tools from one location to another, from one employee to another, from scaffolds or other elevated platforms.
15. Transport hand tools only 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 one hammer against another hammer.
4. Do not use a hammer if your hands are oily, greasy or wet.
5. Do not use a hammer as a wedge or a pry bar.

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. Do not force a screwdriver by using a hammer or pliers on it.
5. Do not use a screwdriver as a punch, chisel, pry bar or nail puller.
6. Use a screwdriver that has an insulated handle for electrical work.
7. Do not carry a screwdriver in your pocket.
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 circuit.
10. When using a spiral ratchet screwdriver, push down firmly and slowly.

Pliers

1. Do not use pliers as a wrench or a hammer.
2. Do not slip a pipe over the handles of pliers to increase leverage.
3. Use pliers with an insulated handle 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.

Wrenches

1. Use box or socket wrenches on hexagon nuts and bolts as a first choice, and open-end wrenches as a second choice.
2. Do not use wrenches that are bent, cracked, badly chipped or that have loose or broken handles.
3. When using an adjustable wrench, turn the wrench so that the fixed jaw, not the adjustable jaw, provides positive pressure in the item to be turned.
4. Do not slip a pipe over a single-head wrench handle for increased leverage.
5. Do not use a shim to make a wrench fit.

6. Size the adjustable wrench to fit the nut before turning.
7. Use a split box wrench on flare nuts.
8. Do not use a wrench with broken or battered points.

Saws

1. Keep control of saws by releasing downward pressure at the end of the stroke.
2. Do not use an adjustable blade saw such as a hacksaw if the blade is not taut.
3. Do not use a saw that has a dull saw blade.
4. Keep hands and fingers away from the saw blade while using the saw.
5. Do not hold the work piece against your body while using the saw.
6. Do not carry a saw by the blade.
7. When using a hand saw, hold the work piece firmly against the worktable.

Clamps

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

Knives/Sharp Instruments

1. When handling knife blades and other cutting tools, direct sharp points and edges away from you.
2. Cut in the direction away from your body when using knives.
3. Store knives in knife blocks or in sheaths after using them.
4. Use the knife that has been sharpened; do not use a knife that has a dull blade.
5. Do not use honing steels that do not have disc guards.
6. Do not attempt to catch a falling knife.
7. Use knives for the operation for which they are named.
8. When opening cartons use the safety box cutters. Do not cut with the blade extended beyond the guard.
9. Do not use knives that have broken or loose handles.
10. Do not use knives as screwdrivers, pry bars, can openers or ice picks.
11. Do not leave knives in sinks full of water.
12. Do not pick up knives by their blades.
13. Carry knives with their tips pointed toward the floor.
14. 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.
15. Follow this procedure before picking up any bags that have sharp objects protruding from them:
Grab the top of the bag above the tie-off using two hands and hold the bag away from your body.
16. Do not submerge hot glass in cold water or submerge a cold glass in hot water.

Toolboxes/Chests/Cabinets

1. Use the handle when opening and closing a drawer or door of a toolbox, chest, or cabinet.
2. Tape over or file off sharp edges on toolboxes, chests or cabinets.
3. Do not stand on toolboxes, chests or cabinets to gain extra height.
4. Lock the wheels on large toolboxes, chests or cabinets to prevent them from rolling.
5. Push large chests, cabinets and toolboxes; do not pull them.
6. Do not open more than one drawer of a toolbox at a time.
7. Close and lock all drawers and doors before moving the tool chest to a new location.
8. Do not use a toolbox or chest as a workbench.
9. Do not move a toolbox, chest or cabinet if it has loose tools or parts on the top.

Energized Electrical Work Policy

Working on Energized Electrical Equipment is inherently dangerous and there are only 3 very specific circumstances in which Erwin Electric will allow employees to work on energized electrical equipment. All other circumstances require electrical equipment to be de-energized, even when doing so is difficult or inconvenient.

1. When working at less than 50V. (NO PPE REQUIRED)
2. When de-energizing could “introduce additional hazards or risks (For example, if it could cause someone’s life support system to crash.
3. When it is “infeasible” to perform the task de-energized, as with many diagnostic tasks that require a loaded system such as voltage testing.

If there is a situation which falls under exceptions #2 or #3, Erwin Electric requires the following:

- An Indemnification Agreement to be completed by customer and Erwin Electric Supervisor
- An Energized Electrical Work Permit to be completed by Erwin Electric Supervisor & approved by Doug or Robin Erwin
- Proper PPE (according to the risk assessment chart provided) shall be worn by Employee.

The following PPE is available and must be used when working on Energized Electrical Equipment:

- Hard Hat/ Arc rated face shield
- Arc rated jacket
- Safety Glasses
- Class 0 Rubber lineman’s gloves with leather protectors
- Hearing protection (ear plugs)

Bus/Bus Room Safety

1. Do not enter or work in the bus room alone.
2. Do not leave the bus room doors open.
3. Do not carry any tools or materials above your waist while in the bus room.
4. Do not work on any bus, bus structure, cable, or disconnect switch unless it is grounded.

General Electrical Device/Fixture Installation Safety

1. Assume all electrical wires as live wires.
2. Turn the main switch to “Off” before removing and replacing power fuses.
3. Do not wear watches, rings or other metallic objects that could act as conductors of electricity around electrical circuits.
4. Before leaving the job, test insulators and equipment to ensure they are free from defects.
5. Do not work near any circuit that is in service without first installing barricades approved by your supervisor.
6. Do not touch field brushes or a synchronous motor until the motor is up to synchronous speed and the field switch is closed.

Ladders

1. All ladders should be inspected for defects before each use.
2. Check the duty rating and weight capacity. The weight capacity includes both your body weight and the weight of any tools and equipment.
3. Always maintain 3 points of contact when climbing a ladder.
4. Do not use the top two steps of a ladder
5. Always climb down to reposition a ladder.
6. When using extension ladders maintain a 4:1 ratio. This means that the ladder should be one foot from the wall for every four foot in height.
7. Extension ladders should extend three feet beyond the surface to be accessed.
8. Extension ladders should be tied off to ensure against movement.
9. When working from a ladder avoid reaching too far (overextending).
10. Use a handline to raise or lower tools or materials.
11. Always limit ladder use to one person at a time.

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 barrels, boxes, 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. Level the scaffold after each move. Do not extend adjusting leg screws more than 12 inches.
10. Do not walk or work beneath a scaffold unless a wire mesh has been installed between the midrail and the toeboard or planking.
11. 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.
12. Do not climb the cross braces for access to the scaffold. Use the ladder.
13. Do not jump from, to, or between scaffolding.
14. Do not slide down cables, ropes or guys used for bracing.
15. Keep both feet on the decking. Do not sit or climb on the guardrails.
16. Do not lean out from the scaffold. Do not rock the scaffold.
17. Keep the scaffold free of scraps, loose tools, tangled lines and other obstructions.
18. Do not throw anything “overboard” unless a spotter is available. Use the debris chutes or lower things by hoist or by hand.
19. Do not move a mobile scaffold if anyone is on the scaffold.
20. Chock the wheels of the rolling scaffold, using the wheel blocks, and lock the wheels by using your foot to depress the wheel lock, before using the scaffold.

Aerial & Scissor Lifts

1. Aerial Lifts and Scissor Lifts are to be operated by authorized and trained employees only.
2. Always ensure that access gates or openings are closed.
3. Do not climb on or lean over guardrails or handrails.
4. Always use a body harness with a lanyard attached to the lift.
5. Always work on firm, level surfaces.
6. If your project is on rough terrain, make sure you use a scissor lift specifically made for use in that environment.
7. Always lower the work platform completely before moving a scissor lift.
8. Always be aware of overhead clearance and do not position the lift between overhead hazards.
9. Inspect lift before operating. If the lift fails the pre-operation inspection, red tag it out and report the problem to your supervisor. Never try to repair the lift yourself.
10. Wear appropriate personal protective equipment (i.e. hard hats, goggles, gloves) during operation.
11. Maintain safe clearance from electrical lines and apparatus.
12. Never exceed the manufacturer’s rated platform capacity.
13. Do not carry materials on the platform railing unless approved by the manufacturer.
14. Do not sit, stand, or climb on the guardrails of an elevated work platform or use planks, ladders, or other devices to gain greater working height.
15. When riding in or working from the platform, keep both feet on the platform’s floor.
16. Cone or section off the work area. Do not allow anyone to work, walk or stand under a raised boom or platform.
17. Watch for obstructions when driving the lift or moving the platform. Inspect the work area for dangerous conditions, uneven surfaces, and overhead obstructions such as power lines. Report unsafe conditions to a supervisor before continuing with the task.
18. Keep non-operational personnel at least 6 ft away from the machine when driving the lift.

Confined Spaces

1. Do not enter a confined space without reading and following the “confined space entry procedure.”
2. Obtain a confined-space entry permit from your supervisor before entering a confined space.

Prior to Entry

1. Get locking devices and labels from your supervisor to lock out and tag “Out of Service” all equipment in the confined space before entering the confined space.
2. Open all windows, doors or manholes of the confined space for ventilation.
3. Use a Combustible Gas Analyzer to test the confined space for an oxygen deficiency or accumulated combustible gases. Do not enter the confined space if the reading for the Combustible Gas Analyzer is above 10 percent LFL and the oxygen level is below 19.5 percent, or greater than 23.5 percent.

When Entering

1. Do not enter the confined space unless an assigned observer or lookout person is posted at the entrance to the confined space. 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.
2. Stay in constant view of the observer when you are working inside the confined space.

Access and Egress Safety

1. Use ladders, structural ramps or stairways as a means of access or egress from excavations or restricted spaces.
2. Do not climb a ladder unless it extends at least 3 feet or three rungs beyond the edge of the trench.

Driving/Vehicle Safety

Employees driving company vehicles or their personal vehicle on company business must have a current driver's license and an acceptable driving record. Employees driving their personal vehicle on company business must provide proof of liability insurance to Erwin Electric.

When driving a company vehicle or their personal vehicle on company business, all traffic laws must be obeyed and driver and passengers must wear a seat belt.

1. Shut your door and fasten your seat belt before moving the vehicle.
2. Always obey all traffic laws and signals.
3. No Texting while driving.
4. No viewing cell phones for any reason (e-mails and texts) while driving, instead pull over and park in a legal parking space.
5. Turn the vehicle off before fueling it and do not smoke while fueling a vehicle.
6. Maintain a three-point contact using both hands and one foot or both feet and one hand when climbing into and out of vehicles.

7. No driver shall operate a company vehicle when his/her ability to do so safely has been impaired by illness, fatigue, injury, or medication.
8. The use of a company vehicle while under the influence of intoxicants and other drugs (including prescription and non-prescription drugs that may cause drowsiness or other impairment) is forbidden and is sufficient cause for discipline, including dismissal.
9. Drivers are required to maintain a safe following distance at all times.
10. Drivers must honor posted speed limits. In adverse driving conditions, reduce speed to a safe operating speed that is consistent with the conditions of the road, weather, lighting, and volume of traffic.
11. Turn signals must be used to show where you are heading; while going into traffic and before every turn or lane change.
12. When passing or changing lanes, view the entire vehicle in your rear view mirror before pulling back into that lane.
13. Avoid driving in other driver's blind spots; attempt to maintain eye contact with the other driver, either directly or through mirrors.

Handling Chemicals

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. Do not use protective clothing or equipment that has split seams, pinholes, cuts, tears, or other visible signs of damage.
3. Each time you use your gloves, wash them before removing the gloves, using cold tap water and normal hand-washing motion. Always wash your hands after removing gloves.
4. Do not use chemicals from unlabeled containers and unmarked cylinders.
5. Do not drag containers labeled "Flammable."
6. Do not store chemical containers labeled "Oxidizer" with containers labeled "Corrosive" or "Caustic."
7. Do not smoke while handling chemicals labeled "Flammable."
8. Do not store chemicals labeled "Flammable" near sources of ignition such as portable heaters.
9. Do not handle or load any containers of chemicals if their containers are cracked or leaking.

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.

Use of Cylinders

1. Do not use dented, cracked or other visually damaged cylinders.

2. Use only an open-ended or adjustable wrench when connecting or disconnecting regulators and fittings.
3. Do not transport cylinders without first removing regulators and replacing the valve-protection caps.
4. Close the cylinder valve when work is finished, when the cylinder is empty or whenever the cylinder is moved.
5. Do not store oxygen cylinders near fuel-gas cylinders such as propane or acetylene, or near combustible material such as oil or grease.
6. Stand to the side of the regulator when opening the valve.
7. 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.
8. Do not hoist or transport cylinders by means of magnets or choker slings.
9. Do not use compressed gas to clean the work area, equipment or yourself.
10. Do not remove the valve wrench from acetylene cylinders while the cylinder is in use.
11. Open compressed gas cylinder valves slowly. Open fully when in use to eliminate possible leakage around the cylinder valve stem.
12. Purge oxygen valves, regulators and lines before use.

General Storeroom/Stockroom Safety

1. Wear leather gloves when handling materials such as copper or aluminum wire.
2. Do not attempt to catch falling materials.
3. Do not try to kick objects out of pathways. Push or carry them out of the way.
4. Move slowly when approaching blind corners.
5. Do not run on stairs or take more than one step at a time.
6. Do not jump from elevated places such as truck beds, platforms or ladders.
7. Do not lift slippery or wet objects; use a hand truck.
8. Obey all safety and danger signs posted in the workplace.

General Housekeeping

1. Follow the instructions on the label and in the corresponding Material Safety Data Sheet (MSDS) for each chemical product you use when cleaning.
2. Mop up water around drinking fountains, drink-dispensing machines and ice machines.
3. When cleaning floors, wet only a small area of the floor at one time and dry mop it before cleaning another section.
4. Use caution signs or cones to barricade slippery areas such as freshly mopped floors.
5. Do not place material such as boxes or trash in walkways and passageways.
6. Keep power cords away from path of vacuum cleaners and floor polishers.
7. Keep doors fully open or fully closed.
8. Visually inspect for sharp objects or other hazards before putting hands, legs or other body parts into trashcans, boxes, laundry bags or used-towel hampers.
9. Follow this procedure before picking up any trash bags or laundry bags: Grab the top of the bag above the tie-off with two hands and hold the bag away from your body.

Office Safety

1. Close drawers and doors immediately after using them.
2. Do not stand on furniture to reach high places.
3. Do not kick objects out of your pathway; pick them up or push them out of the way.
4. Open one file cabinet drawer at a time.
5. Put heavy files in the bottom drawers of file cabinets.
6. Do not block your view by carrying large or bulky items; use the dolly or hand truck or get assistance from a fellow employee.
7. Use the handle when closing doors, drawers and files.
8. Store sharp objects, such as pens, pencils, letter openers or scissors in drawers or with the tips pointing down in a container.
9. Do not tilt the chair you are sitting in on its back two legs.
10. Carry pencils, scissors and other sharp objects with the tips pointing down.
11. Use the ladder or step stool to retrieve or store items that are located above your head.
12. Position hands and fingers onto the handle of the paper cutter before pressing down on the blade.
13. Keep the paper cutter handle in the closed or locked position when it is not being used.
14. Do not use paper-cutting devices if the finger guard is missing.
15. Keep your fingers away from the ejector slot when loading or testing stapling devices.
16. Do not use extension or power cords that have the ground prong removed or broken off.
17. Use a cord cover or tape the cord down when running electrical cords across aisles, between desks or across entrances or exits.
18. Do not place your fingers in or near the feed of a paper shredder.
19. Do not plug multiple electrical cords into a single outlet.
20. Do not throw matches, cigarettes or other smoking materials into trash baskets.
21. Keep doors in hallways fully open or fully closed.
22. Use a staple remover, not your fingers, for removing staples.
23. Turn the power switch to “off” and unplug office machines before adjusting, lubricating or cleaning them.
24. Do not use fans that have excessive vibration, frayed cords or missing guards.
25. Do not place floor type fans in walkways, aisles or doorways.
26. Use the handrails when ascending or descending stairs or ramps.
27. Obey all posted safety and danger signs.
28. Do not use frayed, cut or cracked electrical cords.
29. Do not store or leave items on stairways or walkways.
30. Do not run on stairs or take more than one step at a time.
31. Do not jump from ramps, platforms, ladders or step stools.
32. Clean up spills or leaks immediately by using a paper towel, rag or a mop and bucket.

Residential Construction

Safety and Health Work Practices and Procedures

SAFETY WORK PRACTICES AND PROCEDURES

(Including use of Personal Protective Equipment)

These safety work practices and procedures are developed to assist in achieving job safety by having no employee accidents. Some of these are OSHA requirements. For these reasons, every employee is expected to abide by our safety work practices and procedures at all times.

Residential Construction definition (as defined by OSHA in the December 16, 2010 Directive 03-11-002 and in the Q & A document):

It is a combination of two elements (which must both be satisfied)-The end-use of the structure being built must be a home, i.e. a dwelling; and the structure being built must be constructed using traditional wood frame construction materials and methods. The limited use of structural steel in a predominantly wood-framed home, such as a steel I-beam to help support wood framing does not disqualify a structure from being considered residential construction. Traditional wood frame construction materials and methods will be characterized by: Framing materials—wood (or equivalent cold-formed sheet metal stud) framing, not steel or concrete; wooden floor joists and roof structures. Exterior wall structure: wood (or equivalent cold-formed sheet metal stud) framing or masonry brick or block. Methods: Traditional wood frame construction techniques.

Residential Fall Protection – As per CFR 29 1926.501(b)(13) All employees engaged in residential construction activities and exposed to falls of 6ft or more above lower levels are required to be protected by a conventional fall protection system (guardrail systems, personal fall arrest systems or safety nets). And, in accordance with 29 CFR 29 1926.503, employers must ensure that each employee who might be exposed to fall hazards be trained by a competent person to recognize the hazards of fall and in the procedures to be followed in order to minimize those hazards. The employer must verify the training of each employee by preparing a written certification record that contains the name/identity of the employee(s) trained, the dates of the training, and the signature of the employer or the person who conducted the training. All other applicable OSHA CFR 29 1926 Subpart M parts are expected to be followed.

Fall Protection Plan—when an employer is not going to utilize conventional fall protection systems: The employer must first be able to demonstrate that it is “infeasible” or presents a greater hazard to use conventional fall protection methods at that site. Fall protection plans must be in accordance with CFR 29 1926.502(k). These plans must be site-specific, although such plans are in conformance if they represent a particular style or model of home as long as they fully address all issues related to fall protection at that site, so generally such plans need to be reviewed on a site-by-site basis.

Note: “**Infeasible**” means that it is impossible to perform the construction work using a conventional fall protection system (i.e., guardrail system, safety net system, or personal fall arrest system) or that it is technologically impossible to use any one of these systems to provide fall protection—as per CFR 29 1926.500(b).

Erwin Electric

Hazard Communication Training

The following is information about Erwin Electric's Hazard Communication Plan. As an employee, you have the right to the following:

Information about the characteristics of the toxic substances found in workplaces.

- ☞ Access to Safety Data Sheets for any toxic substance that you are, have been, or may be exposed to in the workplace.
 - Instruction on the adverse health effects of each toxic substance you work with, proper use of these substances, and emergency procedures.

In order to accomplish this, both management and employees have important roles to play in implementing and maintaining Erwin Electric's Hazard Communication Plan:

Labels and other warnings: Erwin Electric's management and supervisors will ensure that products received from outside vendors have complete non-defaced labels. Any chemical transferred from its original container must have a label on the new container that shows the following: Chemical's identity, trade name, and warnings.

Non-routine task hazards: prior to beginning any non-routine task, workers will receive training which will include a description of the task, the necessary tools and chemicals and any inherent hazards of the task. Its vitally important that workers wear the proper protective equipment if there are chemicals involved.

Outside Contractors: Be aware of any outside vendors or contractors who work around you.

They should be told of any chemicals present near their work area. But they also should inform our employees of any chemicals they have brought into and plan to use in our vicinity.

You have the "Right to Know" about the chemical hazards in your workplace. However, this Hazard Communication Plan works only if you:

- ☞ Read labels and SDS's.
- ☞ Know where to find information about chemicals.
- ☞ Follow instructions and heed all warnings.
- ☞ Use proper protective gear and clothing.
- ☞ Learn emergency procedures.
- ☞ Practice safe, sensible work habits.

Without a doubt the most important thing you can do to protect yourself and fellow workers from hazardous chemicals is to read the SDS of chemicals that you are unsure of, and then wear the proper protective equipment as instructed on the SDS. If you'll do this, you can greatly reduce the chances of being adversely affected by any toxic substances in the workplace.

The Hazard Communication Standard of 1994 has been **revised** in order in to provide global standardization of Labeling and Safety Data Sheets.

Major changes to the Hazard Communication Standard:

- **Hazard classification:** Provides specific criteria for classification of health and physical hazards, as well as classification of mixtures. Chemical hazards fall into three major groups: Environmental, Physical and Health.
- **Labels:** Chemical manufacturers and importers will be required to provide a label that includes a harmonized signal word, pictogram, and hazard statement for each hazard class and category. Precautionary statements must also be provided.
- **Safety Data Sheets:** Will now have a specified 16-section format.
- **Information and training:** Employers are required to train workers by December 1, 2013 on the new label's elements and safety data sheets format to facilitate recognition and understanding.

OSHA is requiring that employees are trained on the new label elements (i.e., pictograms, hazard statements, precautionary statements, and signal words) and SDS format by Dec. 1, 2013. OSHA believes that American workplaces will soon begin to receive labels and SDSs that are consistent with the GHS, since many American and foreign chemical manufacturers have already begun to produce HazCom 2012/GHS-compliant labels and SDSs.

Erwin Electric employees need to familiarize themselves with the pictograms and warning labels as we will begin to see them regularly in the workplace. In addition, employees need to know where the Safety Data Sheets are located and how to access critical information in the event of an emergency.

Remember, everyone has a role to play when it comes to handling, storing, labeling and using hazardous chemicals and products in the workplace.

Labels will require the following elements:

Pictogram: a symbol plus other graphic elements, such as a border, background pattern, or color that is intended to convey specific information about the hazards of a chemical. Each pictogram consists of a different symbol on a white background within a red square frame set on a point (i.e. a red diamond). There are nine pictograms under the GHS. However, only eight pictograms are required under the HCS.

Signal words: a single word used to indicate the relative level of severity of hazard and alert the reader to a potential hazard on the label. The signal words used are "danger" and "warning." "Danger" is used for the more severe hazards, while "warning" is used for less severe hazards.

Hazard Statement: a statement assigned to a hazard class and category that describes the nature of the hazard(s) of a chemical, including, where appropriate, the degree of hazard.

Precautionary Statement: a phrase that describes recommended measures to be taken to minimize or prevent adverse effects resulting from exposure to a hazardous chemical, or improper storage or handling of a hazardous chemical.

Safety Data Sheets:

The information required on the safety data sheet (SDS) will remain essentially the same as that in the current standard (HazCom 1994). HazCom 1994 indicates what information has to be included on an SDS but does not specify a format for presentation or order of information. The revised Hazard Communication Standard (HazCom 2012) requires that the information on the SDS be presented using specific headings in a specified sequence.










The format of the 16-section SDS should include the following sections in the following order:

- Section 1. Identification
- Section 2. Hazard(s) identification
- Section 3. Composition/information on ingredients
- Section 4. First-Aid measures
- Section 5. Fire-fighting measures
- Section 6. Accidental release measures
- Section 7. Handling and storage
- Section 8. Exposure controls/personal protection
- Section 9. Physical and chemical properties
- Section 10. Stability and reactivity
- Section 11. Toxicological information
- Section 12. Ecological information
- Section 13. Disposal considerations
- Section 14. Transport information
- Section 15. Regulatory information
- Section 16. Other information, including date of preparation or last revision

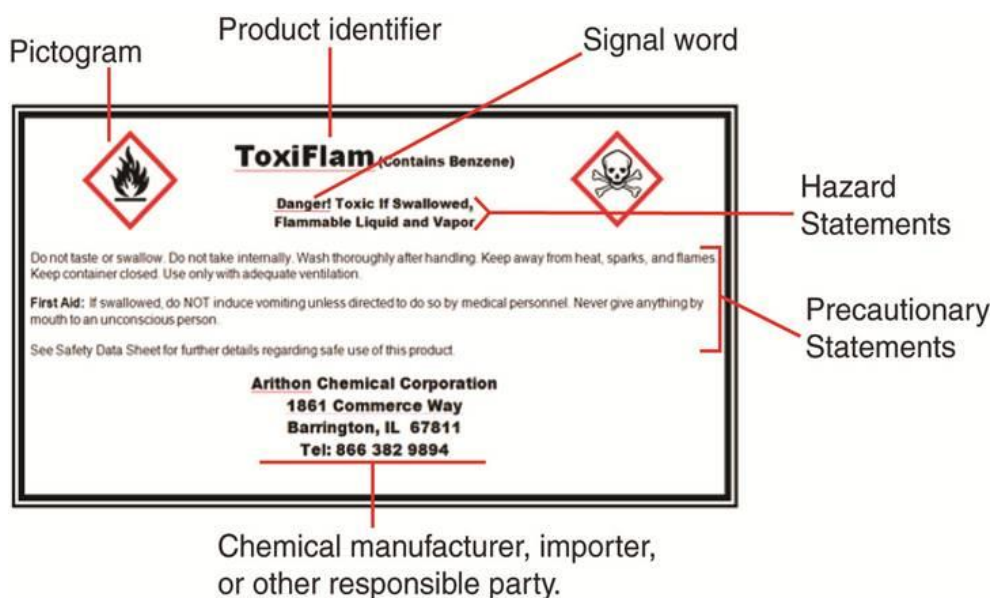
Note: The SDS must also contain Sections 12-15, to be consistent with the United Nations' Globally Harmonized System of Classification and Labeling of Chemicals (GHS). Although the headings for Sections 12-15 are mandatory, OSHA will not enforce the content of these four sections because these sections are within other agencies' jurisdictions.

Pictograms & Hazards

There are nine pictograms under the GHS to convey the health, physical and environmental hazards. The final Hazard Communication Standard (HCS) requires eight of these pictograms, the exception being the environmental pictogram, as environmental hazards are not within OSHA's jurisdiction. The hazard pictograms and their corresponding hazards are shown below.

<p>Health Hazard</p>  <ul style="list-style-type: none"> • Carcinogen • Mutagenicity • Reproductive Toxicity • Respiratory Sensitizer • Target Organ Toxicity • Aspiration Toxicity 	<p>Flame</p>  <ul style="list-style-type: none"> • Flammables • Pyrophoric • Self-Heating • Emits Flammable Gas • Self-Reactive • Organic Peroxides 	<p>Exclamation Mark</p>  <ul style="list-style-type: none"> • Irritant (skin and eye) • Skin Sensitizer • Acute Toxicity (harmful) • Narcotic Effects • Respiratory Tract Irritant • Hazardous to Ozone Layer (Non-Mandatory)
<p>Gas Cylinder</p>  <ul style="list-style-type: none"> • Gases under Pressure 	<p>Corrosion</p>  <ul style="list-style-type: none"> • Skin Corrosion/ burns • Eye Damage • Corrosive to Metals 	<p>Exploding Bomb</p>  <ul style="list-style-type: none"> • Explosives • Self-Reactive • Organic Peroxides
<p>Flame over Circle</p>  <ul style="list-style-type: none"> • Oxidizers 	<p>Environment (Non Mandatory)</p>  <ul style="list-style-type: none"> • Aquatic Toxicity 	<p>Skull and Crossbones</p>  <ul style="list-style-type: none"> • Acute Toxicity (fatal or toxic)

SAMPLE LABEL



SDS INFORMATION

OSHA safe work practices outline the content, but not the exact form, of every Material Safety Data Sheet. Here is what OSHA requires each data sheet to contain:

- **IDENTITY.** The data sheet must contain the name of the chemicals found on the label. In addition, subject to deletion of legitimate trade secrets, it must give the chemical and common name of the substance. If the substance is a mixture and has not been tested as such, the data sheet must give the name of each hazardous constituent.
- **CHARACTERISTICS.** The data sheet must recite the physical and chemical characteristics of the chemical, such as vapor pressure, flash point, etc.
- **PHYSICAL HAZARDS.** Any potential for fire, explosion or reaction must be included in the data sheet.
- **HEALTH HAZARDS.** Signs and symptoms of exposure must be entered, as must all medical conditions that are likely to be aggravated by exposure.
- **ROUTES OF ENTRY.** The data sheet must specify whether the chemical typically enters the system by ingestion, inhalation, dermal exposure or some other route.
- **EXPOSURE LIMITS.** If OSHA has established an exposure limit for the chemical, or if a Threshold Limit Value has been established by the American Conference of Governmental Industrial Hygienists, these must be entered on the data sheet, as must any exposure limit used by the authority preparing the data sheet.
- **CARCINOGENS.** The data sheet must indicate whether the chemical is listed as a carcinogen by the National Toxicology Program, by OSHA, or by the International Agency for Research in Cancer.
- **USE AND HANDLING.** The data sheet must recite any general applicable precautions for safe handling and use that are known to the firm preparing the data sheet, including hygiene practices, protective measures during repair and maintenance of contaminated equipment and procedures for clean-up of spills and leaks. Industrial chemical consumers often might add site-specific procedures to the more general information offered by the chemical manufacturer.
- **EXPOSURE CONTROLS.** The data sheet must include a description of special procedures to be employed in emergencies, as well as a description of appropriate first aid.
- **DATES.** The sheet must bear the date of its preparation or of its latest revision.
- **INFORMATION SOURCE.** Finally, the sheet must recite the name, address and telephone number of the person who prepared the data sheet or of some other person who can provide additional information relating to the chemical, such as citations to scientific literature or specialized emergency procedures.

REQUEST FOR SAFETY DATA SHEETS

Date of Request _____

Department _____

To _____

From _____

I hereby request that I be given the Material Safety Data Sheets on the following hazardous substance(s):

Date Received _____

Acknowledged by _____ (Requesting Employee)

Dept. Manager _____

Date _____

EXPLANATION OF TERMS USED ON SAFETY DATA SHEETS

SECTION I

Chemical Name and Synonyms—The product identification. The chemical or generic name of single elements and compounds.

Trade Names and Synonyms—The name under which the product is marketed and the common commercial name of the product.

Chemical Family—Refers to a grouping of chemicals that behave and react with other chemicals in a similar manner.

Formula—The chemical formula or single elements or compounds.

CAS Number—The Chemical Abstracts Service number, if applicable.

EPA—The code number assigned by the Environmental Protection Agency, if applicable.

DOT Classification—The appropriate classification as determined by the regulations of the Office of Hazard Material, Department of Transportation.

SECTION II

Hazardous Ingredients—The major components as well as any minor one(s) having potential for harm that are considered when evaluating the product.

TLV—Threshold Limit Value (TLV) indicates the permissible exposure concentration, a limit established by a government regulatory agency, or an estimate if none has been established.

SECTION III

Physical Data

Boiling Point (°F)—The temperature in degrees Fahrenheit at which the substances will boil.

Vapor Pressure—The pressure of saturated vapor above the liquid expressed in mm Hg at 20° C.

Vapor Density—The relative density or weight of a vapor or gas (with no air present) compared with an equal volume of air at ambient temperature.

Solubility in Water—The solubility of a material by weight in water at room temperature. The terms negligible, less than 0.1 percent, 0.1 to 1 percent; moderate 1 to 10 percent, applicable 10 percent or greater.

Appearance and Odor—The general characterization of the material, i.e., powder, colorless liquid, aromatic odor, etc.

Specific Gravity (H₂O=1)—The ratio of the weight of a volume of the material to its weight of an equal volume of water.

Percent, Volatile by Volume (%)—The percent by volume of the material that is considered volatile. (The tendency or ability of a liquid to vaporize.)

Evaporation Rate—The ratios of the time required to evaporate a measured volume of a liquid to the time required to evaporate the same volume of a reference liquid (ethyl ether) under ideal test conditions. The higher the ratio, the slower the evaporation rate.

SECTION IV

Flash Point (Method Used)—The temperature in degrees Fahrenheit at which a liquid will give off enough flammable vapor to ignite in the presence of a source of ignition.

SECTION V

Conditions to Avoid—Conditions that, if they exist with the substance present, could cause it to become unstable.

Incompatibility (Materials to Avoid)—Materials that will react with the substance.

Hazardous Decomposition Products—Refers to that reaction that takes place at a rate that releases large amounts of energy. Indicates whether it may occur and under what storage conditions.

SECTION VI

Health Hazard Data—Possible health hazards as derived from human observation, animal studies or from the results of studies with similar products.

Threshold Limit Value (TLV)—The value for airborne toxic material that are to be used as guides in the control of health hazards and represent concentrations to which nearly all workers may be exposed eight hours per day over extended periods of time without adverse effects.

Effects of Overexposure—The effects on or to an individual who has been exposed beyond the specified limits.

Emergency and First-Aid Procedures—Gives first-aid and emergency procedures in case of eye and/or skin contact, ingestion and inhalation.

SECTION VII

Stability—Whether the substance is stable or unstable, an unstable substance is one that will vigorously polymerize, decompose, condense, or will become self-reactive under conditions of shock, pressure, or temperature.

A copy of the form you may want to use to list your hazardous substances by work area follows this page. This information would be based on the initial survey and subsequent hazard determination.

SECTION VIII

Spill or Leak Procedures—Steps to be taken if material is released or spilled. Method and materials to use to clean up or contain.

Waste Disposal Method—Method and type of disposal site to use.

SECTION IX

Special Protection Information

Respiratory Protection—Specific type should be specified, i.e., dust mask, NIOSH-approved cartridge respirator with organic-vapor cartridge.

Ventilation—Type of ventilation recommended, i.e., local exhaust, mechanical, etc.

Protective Gloves—Refers to the glove that should be worn when handling the product, i.e., cotton, rubber.

Eye Protection—Refers to the type of eye protection that is to be worn when handling or around the product.

Flammable Limits—The range of gas or vapor concentration (percent by volume in air) that will burn or explode if an ignition source is present. (Lel) means the lower explosive limits and (Uel) the upper explosive limits given in percent.

Extinguishing Media—Specifies the fire-fighting agent(s) that should be used to extinguish fires.

Special Fire-Fighting Procedures/Unusual Fire and Explosion Hazards—Refer to special procedures required if unusual fire or explosion hazards are involved.

➤ **WHAT TO DO IN THE EVENT OF AN ACCIDENT** ◀

When an accident occurs it is imperative that we document the event by gathering as much information as possible as to what happened, who witnessed it and what was done to address the conditions that caused the incident.

Our first concern must always be to take care of any injured parties.

Naturally, each accident is unique – some require emergency medical response by EMT professionals, others require a visit to a doctor or clinic, some only need on-site first aid treatment, and some are close calls that do not require any treatment – but they could have if circumstances were different.

Therefore, the first thing that must be done is an immediate determination as to the nature and extent of the injury. In the event of a serious injury, a 911 call must be made as soon as the individual is safely removed from further danger or injury.

Accident / Incident Investigation

Accident / Incident Investigation Procedures

The supervisor at the location where the accident or incident occurred will perform an investigation. These investigations are to assess the nature and the cause of the accident or incident, not to place blame on personnel. Incidents can include property damage, near misses and workplace injuries and illnesses. Supervisors need to investigate such incidents using procedures that include:

- Implement temporary control measures to prevent any further injuries to employees or damage to equipment or property or the public.
- Review the equipment, operations, and processes to gain an understanding of the accident situation.
- Identify and interview each witness and any other person who might provide clues to the causes.
- Investigate causal conditions and unsafe acts; make conclusions based on existing facts.
- Complete the incident investigation report.
- Provide recommendations for corrective actions.
- Indicate the need for additional or remedial safety training, if needed.

Accident / Incident Investigation Forms

The following forms can be found in this packet and should be completed as appropriate:

Accident Investigation Form -

This form should be completed for ALL accidents that result in an injury of any type.

First Aid Report -

Complete this form if First Aid is performed on-site, even if the injured person ends up going to the doctor/clinic afterwards.

Non-Injury Incident / Near Miss Investigation Form -

This form is ONLY to be used when a close call is observed, or an incident happens but
no one gets injured.

Witness Form -

This should be filled out by any and all witnesses to the accident or incident and shall be included with the appropriate Investigation form.

IMPORTANT:

Accident and Incident investigation reports must be submitted to the designated management personnel as soon as possible after the accident or incident.

These forms are to be completed in their entirety. We need as much information as possible to ensure we take the appropriate steps to prevent a recurrence.

RECORD KEEPING PROCEDURES

The company will control and maintain all employee accident and injury records. Records are maintained for a minimum of five (5) years following the end of the year to which they relate. The data on the Injury and Illness log and posting of the Summary of Work-related injuries and illnesses will be in accordance with government regulations. The following will be included in the record keeping process:

- Log of Work-related Injuries and Illnesses (OSHA form 300)
- Summary of Work-related Injuries and Illnesses (OSHA form 300A)
- Incident investigation reports (OSHA form 301 or similar)
- Workers' Compensation Notice of Injury