FIRST AID & CPR

- The victim may often be unconscious.
- Heat stroke is life threatening, and the victim must be cooled rapidly with cold water over the entire body. Seek medical attention immediately.

9. Frostbite

The frostbitten skin is white or grayish-yellow, and the victim feels cold and numb. Pain is initially felt but subsides quickly. There may be no feeling in the frostbitten areas. Treatment for frostbite is as follows:

- Apply lukewarm water or cover the area in a woolen material. Do not rub the area.
- If fingers or hands are frostbitten, have the victim hold the affected area in the armpits.
- When the frostbitten area has warmed up, encourage the victim to exercise it gently.
- Do not warm the areas with hot water, heat lamps, or campfires.

10. Poison Plants

- Contact with poison ivy, poison oak, or poison sumac can result in skin poisoning.
- Symptoms of skin poisoning include itching, blisters or redness of the skin after contact with the poison plants.
- Treatment for these symptoms is to carefully remove contaminated clothing so it doesn't contact other body parts. Wash with mild soap, water, and rinse. Repeat several times. If available, sponge affected areas gently with rubbing alcohol.
- If blistering occurs, contact a physician.

11. Swallowed Poisons

- There are hundreds of kinds of poisoning and guidelines for their treatment. Professional medical advice should be obtained as soon as possible.
- If the substance is known, check the MSDS sheet for instructions. Phone a Poison Control Center if possible.
- If the victim is conscious and alert, induce vomiting by putting a finger down the throat. If the substance ingested is a hydrocarbon, do not induce vomiting.
- Call a physician, emergency room, or poison control center for advice.

12. Insect Stings

- When stung by a bee, wasp, yellow jacket, ant, or other insects, the person will experience pain and mild swelling. He should report to his supervisor.
- The stinger should be removed if possible, and ice gently rubbed over the affected area. Usually, nothing more needs to be done.
- Hypersensitive persons should carry a physician approved bite sting kit. Fellow workers should be made aware of their condition to aid him in case of a sting.

13. Venomous Snake Bites

- Rattlesnakes, copperhead, cottonmouth (water moccasin), and the coral snake are the most common poisonous snakes encountered in the United

States.

- Rattlesnakes, copperheads, and cottonmouths are members of the pit viper family. The fangs of pit vipers leave two puncture wounds where the poison is injected. (All nonpoisonous snakes leave a row of teeth marks when they bite.) Because of the small size of the coral snake, it must bite and chew to inject its poison. Coral snakes are not as aggressive as the pit vipers.

First Aid for snake bites (rattlers, cottonmouths, copperheads) consists of the following:

- Keep the bite lower than the heart if possible.
- Keep the victim warm, calm, and quiet.
- Transport the victim to a medical facility as soon as possible.
- Try to identify the snake if possible. Kill the snake if possible and bring it to the attending physician.
- Do not cut the wound. Do not apply a tourniquet. Do not suck the wound. Do not apply ice to the wound.
- Coral Snake First Aid: Wash the area of the bite with clear water if available. Transport the victim to a medical facility as soon as possible. Suction and constrictor bands are ineffective on the bite of the coral snake.

Note: If medical care is more than 30 minutes away, consider suctioning the bites of the pit vipers using a snakebite kit if one is available.

14. Spider Bites

- Most spiders cannot penetrate human skin to inject their venom. Two that can are the black widow and the brown recluse (fiddle back).
- The black widow is usually found in dark, moist places. It is jet black and has a red, hourglass mark on its abdomen. Its bite immediately causes severe pain at the bite site.
- The brown recluse is normally found in sheds, houses, closets, and under leaves and limbs. It has a violin-shaped mark on its back. Its bite causes little or no immediate pain. Usually, a victim is not aware of the bite for several hours until a crusted wound surrounded by a black bulls-eye appears at the bite site. This wound is an indication that tissue damage has occurred due to the spider's venom.

These bites cause severe disability to the victim because the venom destroys all the tissue with which it comes in contact.

One or all of the following symptoms may occur from spider bites or snakebites:

- Pain and swelling at the bite site.
- Headache.
- Nausea or vomiting.
- Muscle cramps.
- Joint pain.

Treatment for a spider bite is as follows:

- Have the victim to lie down.
- Transport the victim to a medical facility as soon as possible.

- Ice cubes may be massaged on the bite site if the pain is severe. Ice should not be applied for prolonged periods.
- Do not allow the victim to walk.
- Do not give the victim alcoholic beverages.

15. Additional Items

There are numerous fire blankets, burn kits, burn gels, etc., available. Serious consideration should be given as to including these items in all First Aid kits. Due to the remote location of most of our work, these items should be available to render the best care possible for injured employees.

Note: Company physicians should be consulted as to contents of First Aid kits, blood borne pathogen kits and exposure control, along with any specialty items that may be needed.

16. Recognizing Emergencies

- Emergencies are often signaled by something unusual or odd that catches your attention. The three senses that can most help you recognize an emergency are hearing, sight, and smell.
- Unusual noises such as screams, yells, or calls for help. The sound of breaking glass, explosions, and vehicle tires screeching, sudden loud noises are all indications that an accident may be taking place.
- Unusual sights, broken glass, downed or sagging power lines, overturned machinery or equipment, a trail of blood are signs of an accident having taken place.
- Strange odors that are unrecognizable or stronger than usual.
- Odd behavior or unusual behavior like difficulty in breathing, slurred or confused speech, confusion or drowsiness, sweating for no apparent reason are all signs that something is amiss.

ALWAYS BE AWARE. PAY ATTENTION TO WHAT'S GOING ON AROUND YOU AT ALL TIMES.

HAND and POWER TOOLS

1. Scope

This Procedure outlines the minimum requirements for Hand and Power Tools. It can or may be used in lieu of CLIENTS own Hand and Power Tools or in conjunction with it.

2. Purpose

Tools are such a common part of our lives that it is difficult to remember that they may pose hazards. All tools are manufactured with safety in mind but, tragically, a serious accident often occurs before steps are taken to search out and avoid or eliminate tool– related hazards. In the process of removing or avoiding the hazards, workers must learn to recognize the hazards associated with the different types of tools and the safety precautions necessary to prevent those hazards.

3. Hand Tools

Hand tools are non–powered. They include anything from axes to wrenches. The greatest hazards posed by hand tools result from misuse and improper maintenance. Some examples:

- Using a chisel as a screwdriver may cause the tip of the chisel to break and fly, hitting the user or other employees.
- If a wooden handle on a tool such as a hammer or an ax is loose, splintered, or cracked, the head of the tool may fly off and strike the user or another worker.
- A wrench must not be used if its jaws are sprung, because it might slip.
- Impact tools such as chisels, wedges, or drift pins are unsafe if they have mushroomed heads. The heads might shatter on impact, sending sharp fragments flying.
- The employer is responsible for the safe condition of tools and equipment used by employees but the employees have the responsibility for using and maintaining tools properly.
- Employers should caution employees that saw blades, knives, or other tools be directed away from aisle areas and other employees working in close proximity. Knives and scissors must be sharp. Dull tools can be more hazardous than sharp ones.
- When employees are working with hand knives, boning knives, draw knives, and scissors they should use personal protective equipment such as wire mesh gloves, wrist guards, arm guards, and aprons or belly guards.

Safety requires that floors be kept as clean and dry as possible to prevent accidental slips with or around dangerous hand tools. Around flammable substances, sparks produced by iron or steel hand tools can be a dangerous ignition source. Where this hazard exists, spark–resistant tools made from brass, plastic, aluminum, or wood will provide for safety.

4. Power Tool Precautions

Power tools can be hazardous when improperly used. There are several types of power tools, based on the power source they use: electric, pneumatic, liquid fuel, hydraulic, and powder–actuated. Employees should be trained in the use of all tools - not only power tools. They should understand potential hazards and safety precautions to prevent those hazards from occurring.

HAND and POWER TOOLS

Power tool users should observe the following general precautions:

- Never carry a tool by the cord or hose.
- Never yank the cord or the hose to disconnect from the receptacle.
- Keep cords and hoses away from heat, oil, and sharp edges.
- Disconnect tools when not in use, before servicing, and when changing accessories such as blades, bits, and cutters.
- All observers should be kept at a safe distance from the work area.
- Secure work with clamps or a vise, freeing both hands to operate the tool.
- Avoid accidental starting. The worker should not hold a finger on the switch button while carrying a plugged–in tool.
- Tools should be maintained with care. They should be kept sharp and clean for the best performance. Follow instructions in the user's manual for lubricating and changing accessories.
- Be sure to keep good footing and maintain good balance.
- The proper apparel should be worn. Loose clothing, ties, or jewelry can become caught in moving parts.
- All portable electric tools that are damaged shall be removed and tagged "Do Not Use".

5. Guards

Hazardous moving parts of a power tool need to be safeguarded. For example, belts, gears, shafts, pulleys, sprockets, spindles, drums, fly wheels, chains, or other reciprocating, rotating, or moving parts of equipment must be guarded if such parts are exposed to contact by employees.

Guards, as necessary, should be provided to protect the operator and others from:

- Point of operation.
- In–running nip points.
- Rotating parts.
- Flying chips and sparks.

Safety guards must never be removed when the tool is being used. For example, portable circular saws must be equipped with guards. An upper guard must cover the entire blade of the saw. A retractable lower guard must cover the teeth of the saw, except when it makes contact with the work material. The lower guard must automatically return to the covering position when the tool is withdrawn from the work.

6. Safety Switches

- The following hand–held powered tools must be equipped with a momentary contact "on–off" control switch: drills, tappers, fastener drivers, horizontal, vertical and angle grinders with wheels larger than two inches in diameter, disc sanders, belt sanders, reciprocating saws, saber saws, and other similar operations. These tools may also be equipped with a lock–on control provided that turnoff can be accomplished by a single motion of the same finger or fingers that turn it on.
- The following hand–held powered tools may be equipped with only a positive "on–off" control switch: platen sanders, grinders with wheels two inches or

less in diameter, routers, planers, laminate trimmers, nibblers, shears, scroll saws and jigsaws with blade shanks one–fourth inch wide or less.

- Other hand–held powered tools such as circular saws, chain saws, and percussion tools without positive accessory holding means must be equipped with a constant pressure switch that will shut off the power when the pressure is released.

7. Electric Tools

Employees using electric tools must be aware of several dangers; the most serious is the possibility of electrocution. Among the chief hazards of electric–powered tools are burns and slight shocks that can lead to injuries or even heart failure. Under certain conditions, even a small amount of current can result in fibrillation of the heart and eventual death. A shock also can cause the user to fall off a ladder or other elevated work surface.

To protect the user from shock, tools must both have a three–wire cord with ground and be grounded, be double insulated, or be powered by a low–voltage isolation transformer. Three–wire cords contain two current–carrying conductors and a grounding conductor. One end of the grounding conductor connects to the tool's metal housing. The other end is grounded through a prong on the plug. Anytime an adapter is used to accommodate a two–hole receptacle, the adapter wire must be attached to a known ground. The third prong should never be removed from the plug.

Double insulation is more convenient. The user and the tools are protected in two ways: by normal insulation on the wires inside, and by a housing that cannot conduct electricity to the operator in the event of a malfunction.

The following general practices should be followed when using electric tools:

- Electric tools should be operated within their design limitations.
- Gloves and safety footwear are recommended during use of electric tools.
- When not in use, tools should be stored in a dry place.
- Electric tools should not be used in damp or wet locations.
- Work areas should be well lighted.

8. Powered Abrasive Wheel Tools

Powered abrasive grinding, cutting, polishing, and wire buffing wheels create special safety problems because they may throw off flying fragments. Before an abrasive wheel is mounted, it should be inspected closely and sound– or ring–tested to be sure that it is free from cracks or defects. To test, wheels should be tapped gently with a light non– metallic implement. If they sound cracked or dead, they could fly apart in operation and so must not be used. A sound and undamaged wheel will give a clear metallic tone or "ring".

To prevent the wheel from cracking, the user should be sure it fits freely on the spindle. The spindle nut must be tightened enough to hold the wheel in place, but not tight enough to distort the flange. Follow the manufacturer's recommendations. Care must be taken to ensure that the spindle wheel will not exceed the abrasive wheel specifications.

HAND and POWER TOOLS

Due to the possibility of a wheel disintegrating (exploding) during start–up, the employee should never stand directly in front of the wheel as it accelerates to full operating speed. Portable grinding tools need to be equipped with safety guards to protect workers, not only from the moving wheel surface, but also from flying fragments in case of breakage.

In addition, when using a powered grinder:

- Always use eye protection.
- Turn off the power when not in use.
- Never clamp a hand–held grinder in a vise.

9. Pneumatic Tools

Are powered by compressed air; they include chippers, drills, hammers, and sanders. There are several dangers encountered in the use of pneumatic tools:

- The main one is the danger of getting hit by one of the tool's attachments, or some kind of fastener the worker is using with the tool.
- Pneumatic tools that shoot nails, rivets, or staples, and operate at more than 100 pounds per square inch, must be equipped with a special device to keep fasteners from being ejected unless the muzzle is pressed against the work surface.
- Eye protection is required and face protection is recommended for employees working with pneumatic tools.
- Noise is another hazard. Working with noisy tools such as jackhammers requires proper, effective use of ear protection.
- When using pneumatic tools, employees must check to see that they are fastened securely to the hose by a positive means to prevent them from becoming disconnected. A short wire or positive locking device attaching the air hose to the tool will serve as an added safeguard.
- Airless spray guns which atomize paints and fluids at high pressures (1,000 pounds or more per square inch) must be equipped with automatic or visual manual safety devices which will prevent pulling the trigger until the safety device is manually released.
- If an air hose is more than one–half inch in diameter, a safety excess flow valve must be installed at the source of the air supply to shut off the air automatically in case the hose breaks.
- In general, the same precautions should be taken with an air hose that are recommended for electric cords, since the hose is subject to the same kind of damage or accidental striking and presents tripping hazards.
- A safety clip or retainer must be installed to prevent attachments, such as chisels on a chipping hammer, from being unintentionally shot from the barrel.
- Screens must be set up to protect nearby workers from being struck by flying fragments around chippers, riveting guns, staplers, or air drills.
- Compressed air guns should never be pointed toward anyone. The user should never "dead–end" it against him or herself or anyone else.
- Heavy jackhammers can cause fatigue and strains; heavy rubber grips reduce these effects by providing a secure handhold.
- Workers operating a jackhammer must wear safety glasses and safety

shoes, which protect against injury if the hammer slips of falls. A face shield should also be used.

10. Liquid–Fuel Tools

A third type of tool is fuel–powered, usually by gasoline. The most serious hazard with fuel–powered tools comes from fuel vapors that can burn or explode and give off dangerous exhaust fumes. The worker must be careful handling, transporting, and storing the gas or fuel in approved flammable liquid containers, according to proper procedures for flammable liquids. Before the tank for a fuel–powered tool is refilled the user must shut the engine down and allow it to cool to prevent accidental igniting of hazardous vapors.

If a fuel–powered tool is used inside a closed area, effective ventilation and/or personal protective equipment is necessary to avoid breathing carbon monoxide. Fire extinguishers must be available in the area.

11. Powder–Actuated Tools

Powder–actuated tools operate as a loaded gun and should be treated with the same respect and precautions. In fact, they are so dangerous that only specially trained employees must operate them.

Safety precautions to remember:

- These tools should not be used in an explosive or flammable atmosphere.
- Before using the tool, the worker should inspect it to determine that it is clean, that all moving parts operated freely, and that the barrel is free from obstructions.
- The tool should never be pointed at anybody.
- The tool should not be loaded unless it is to be used immediately. A loaded tool should not be left unattended, especially where it would be available to unauthorized persons.
- Hands should be kept clear of the barrel end. To prevent the tool from firing accidentally, two separate motions are required for firing: one to bring the tool into position, and another to pull the trigger. The tools must not be able to operate until they are pressed against the work surface with a force of at least five pounds greater than the total weight of the tool.
- If a powder–actuated tool misfires, the employee should wait at least 30 seconds, then try firing it again. If it still will not fire, the user should wait another 30 seconds so that the faulty cartridge is less likely to explode, then carefully remove the load. The bad cartridge should be put in water.
- Suitable eye and face protection are essential when using a powder–actuated tool.
- The muzzle end of the tool must have a protective shield or guard centered perpendicularly on the barrel to confine any flying fragments or particles that might otherwise create a hazard when the tool is fired. The tool must be designed so that it will not fire unless it has this kind of safety device.
- All powder–actuated tools must be designed for varying powder charges so that the user can select a powder level necessary to do the work without excessive force.
- If the tool develops a defect during use it should be tagged and taken out of

service immediately until it is properly repaired.

12. Fasteners

When using powder–actuated tools to apply fasteners there are some precautions to consider. Fasteners must not be fired into material that would let them pass through to the other side. The fastener must not be driven into materials like brick or concrete any closer than three inches to an edge or corner. In steel, the fastener must not come any closer than a half–inch from a corner or edge. Fasteners must not be driven into very hard or brittle materials, which might chip or splatter, or make the fastener ricochet. An alignment guide must be used when shooting a fastener into an existing hole. A fastener must not be driven into a spalled area caused by an unsatisfactory fastening.

13. Hydraulic Power Tools

The fluid used in hydraulic power tools must be an approved fire–resistant fluid and must retain its operating characteristics at the most extreme temperatures to which it will be exposed. The manufacturer's recommended safe operating pressure for hoses, valves, pipes, filters, and other fittings must not be exceeded.

14. Jacks

All jacks—lever and ratchet jacks, screw jacks, and hydraulic jacks—must have a device that stops them from jacking up too high. Also, the manufacturer's load limit must be permanently marked in a prominent place on the jack and should not be exceeded.

A jack should never be used to support a lifted load. Once the load has been lifted, it must immediately be blocked up. Use wooden blocking under the base if necessary to make the jack level and secure. If the lift surface is metal, place a one–inch thick hardwood block or equivalent between it and the metal jack head to reduce the danger of slippage.

To set up a jack, be sure that:

- The base rests on a firm level surface.
- The jack is correctly centered.
- The jack head bears against a level surface.
- The lift force is applied squarely.

Proper maintenance of jacks is essential for safety. All jacks must be inspected before each use and lubricated regularly. If a jack is subjected to an abnormal load or shock, it should be thoroughly examined to make sure it has not been damaged. Jacks exposed to freezing temperatures must be filled with an adequate antifreeze liquid.

15. General Safety Precautions

Employees using hand and power tools and exposed to the hazard of falling, flying, abrasive and splashing objects, or exposed to harmful dusts, fumes, mists, vapors, or gases must be provided with the particular personal protection equipment necessary to protect them from the hazard.

HAND and POWER TOOLS

Following five basic safety rules can prevent all hazards involved in the use of power tools:

- Keep all tools in good condition with regular maintenance.
- Use the right tool for the job.
- Examine each tool for damage before use.
- Operate according to the manufacturer's instructions.
- Provide and use the right personal protective equipment.

Employees and employers have a responsibility to work together to establish safe working procedures. If a hazardous situation is encountered, it should be brought to the attention of the proper individual immediately.

GHS HAZCOM

1. Scope

This program covers all work operations at Black Stallion, Inc. where employees may be exposed to hazardous chemicals under normal working conditions or during an emergency situation

This Procedure outlines the minimum requirements for Global Harmonization System (GHS) Hazard Communication (HAZCOM) Procedure. It can or may be used in lieu of CLIENTS own Global Harmonization System (GHS) Hazard Communication (HAZCOM) Procedure or in conjunction with it.

2. Definitions

Mentor – An experienced employee assigned to help a new employee through a period of familiarization of site safety policies and rules. Identified with a Green Mentor hardhat sticker placed on his or her hardhat.

3. Policy Statement

It is the policy of **Black Stallion, Inc.** to reduce employee exposure to hazardous chemicals and the overall incidence of chemical-related injuries and illnesses. All employees who are potentially exposed to hazardous chemicals in their assigned jobs will be fully informed of the hazards of the chemicals and protective measures to minimize exposure to these chemicals. This type of information will be made available to employees by means of labels on chemical containers, safety data sheets (SDSs), and training. Employees will be informed of any known hazards associated with chemicals to which they may be exposed before their initial assignment, whenever the hazards change, or when new hazardous chemicals are introduced into their respective work areas.

4. Plan Administration

The *Program Contact Information* table provides the roles and contact information for the administration of the hazard communication program.

Program Contact Information

Task	Contact Person	Contact Information
Program Administrator	**Corporate Safety**	225-933-0250
Chemical Labeling	**Corporate Safety**	225-933-0250
SDS Inventory	**Corporate Safety**	225-933-0250
Employee Training	**Corporate Safety**	225-933-0250

The **program administrator** is responsible for the implementation of the Plan, including reviewing and updating it as necessary. The administrator or designee(s) is responsible for:

- Properly labeling all containers of hazardous chemicals and for maintaining and updating the labels,
- Maintaining up-to-date SDSs and ensuring that they are readily accessible in all work areas,
- Informing and training employees concerning hazardous chemicals in their work areas.

GHS HAZCOM

Plan Review and Update
This Plan will be periodically reviewed and updated, and updated whenever new hazards are introduced into the workplace.

Plan Availability
Copies of the Plan, including the written training program, are available upon request to employees, their designated representatives, safety and health regulatory agency, and to NIOSH.

Copies of the Plan are available in the safety office.

5. Definitions
Chemical—any substance, or mixture of substances.

Hazardous chemical—any chemical that is classified as a physical hazard or a health hazard, a simple asphyxiate (i.e., displaces oxygen in the ambient atmosphere), combustible dust, pyrophoric gas (i.e., gas that will ignite spontaneously in air at 130 degrees Fahrenheit or below), or hazard not otherwise classified.

Chemical label—an appropriate group of written, printed, or graphic information elements concerning a hazardous chemical that is affixed to, printed on, or attached to the immediate container of a hazardous chemical or to the outside packaging, with the specified pictogram, hazard statement, signal word, and precautionary statement for each hazard class and category.

Safety Data Sheet (SDS)—a written description of a hazardous chemical or chemical product in a 16-section format that contains comprehensive technical information about a particular substance and explains the risks, precautions, and remedies to exposure related to the chemical.

6. Labeling Of Containers
All containers with hazardous chemicals will be labeled. Each container will include either:

- The label shipped with the chemical container; *or*
- A label, tag, or marking with product identifier and combination of words, pictures, or symbols that provide general information regarding the hazards of the chemicals and information about the physical and health hazards of the chemical.

Secondary Container
The administrator or designee will ensure that all secondary containers in which a chemical has been transferred from the original manufacturer's container are labeled, tagged, or marked with either an extra copy of the original manufacturer's label or with alternative labels that contain the same information required on the manufacturer's label.

Stationary Process Container

On individual stationary process containers *signs, placards, batch tickets, or process sheets* will be used rather than a label to convey the required information. The written materials used as an alternative to container labels will be readily accessible to employees in their work area throughout each work shift.

The *Stationary Process Containers* table contains the list of stationary process containers and their locations in the facility.

Stationary Process Containers

Process Container	Location	Type of Label
Fuel Tanks for construction equipment	Various Job Sites	Signs & Placards

In-House Container Label System

Where in-house labels on containers replace the original labels provided by the chemical supplier, they will include at least the following label elements:

- Pictogram that may include 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,
- Hazard 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,
- Signal word (i.e., "Warning" or "Danger") to indicate the relative level of severity of hazard,
- Precautionary statement for each hazard class and category that describes recommended measures that should be taken to minimize or prevent adverse effects resulting from exposure to a hazardous chemical, or improper storage or handling.

The in-house labeling system is designed according to the *NFP and, HMIS which complies with the GHS provisions of the hazard communication standard* system.

The administrator will review the organization's labeling procedures every **annually** and will update labels as required.

Portable Containers

Labels are not required on portable containers into which hazardous chemicals are transferred from labeled containers and that are intended only for the immediate use of the employee who performs the transfer.

7. Safety Data Sheet (SDS)

Procedures will be developed to ensure that employees obtain the necessary SDSs and that any new information is communicated to affected employees. Black Stallion, Inc. / Bayouoilfield Const. Co. Inc.does not process or produce any chemicals and therefore does not have trade secret information to withhold.

SDS Access

SDSs will be readily available to all employees during each work shift. The primary method for accessing SDSs in work areas is **printed copies at work site in tool van and offices, computer system, CDs issued with quarterly updates, fax-back from Division Office or Corporate Safety, or call Corporate Safety at 225-933-0250.**

Primary Access System
Following are the steps that employees will follow to access an SDS:

- Ask your immediate supervisor for a copy
- Go to the Tool Van and obtain a copy of relevant SDS
- Call Corporate Safety at 225-933-0250

Backup System
The backup system for accessing SDSs should the primary system fail is **Corporate Safety at 225-933-0250.**

SDS Not Available
If an SDS is not available, or an employee has a problem accessing a SDS, the employee will contact the plan administrator or a supervisor. The missing SDS will be provided to the employee requesting it by the employee's next work shift at the latest, unless the SDS has not been received from the chemical supplier.

If an SDS is not received at the time of initial shipment, the administrator will contact the supplier, in writing, to request the SDS. If an SDS is not received from the supplier within 15 days after the written request is sent, the appropriate government agency will be contacted for assistance in obtaining the SDS.

New or Revised SDSs
The notice that identifies the person responsible for maintaining SDSs and where the SDSs they are located are posted at **each location and included in the Site Specific Safety Plan.** Employees will be notified at the same location(s) when new or revised SDSs are received. When new or revised SDSs are received, the following procedure will be followed to replace old SDSs:

- Send original SDS to Corporate Safety for inclusion into the electronic database
- Updated CDs will be issued to each Safety Coordinator
- Each Safety Coordinator will place a copy in each of their respective job site SDS manuals.

8. Employee Training and Information

Employee Information
Each employee will be informed about:

- The employer's duty to provide information and training about chemical hazards, chemical labeling, SDSs, and protective measures
- The hazardous chemicals present in the employee's work area

- The location and availability of the written hazard communication program, list of hazardous chemicals, and SDSs

Initial Employee Training
Everyone who works with or is potentially exposed to hazardous chemicals will receive initial training on the Hazard Communication Standard and this Plan before starting work. Before a new hazardous chemical is introduced into any work area, each employee in the affected work area will be given information and training about the new chemical hazard.

Training Content and Format
Each new employee will receive information and training that covers:

- The physical and health risks of the hazardous chemicals
- Symptoms of overexposure
- How to determine the presence or release of hazardous chemicals in the work area
- How to reduce or prevent exposure to hazardous chemicals through use of control procedures, work practices and personal protective equipment
- Steps taken to prevent exposure to hazardous chemicals
- Procedures to follow if employees are exposed to chemical hazards
- How to read and interpret chemical labels and SDSs

Training will be delivered through a combination of hands-on demonstration, audiovisuals, interactive electronic programs, and classroom instruction.

Retraining
Additional training will be conducted when new chemicals are introduced into the work area. Retraining is not required if the new chemical contains hazards similar to previously existing chemicals for which training has already been conducted.

Training Records
All employees attending hazard communication training sessions must sign a sheet at the end of the session or otherwise record their attendance.

9. Non-Routine Tasks Involving Hazardous Chemicals
From time to time, employees may be required to perform non-routine tasks that could potentially result in temporary exposure to hazardous chemicals. The *Non-Routine Tasks Involving Hazardous Chemicals* table contains a list of non-routine tasks that are periodically performed by employees, the hazardous chemical(s) involved, and the specific hazard(s) to be avoided.

Non-Routine Tasks Involving Hazardous Chemicals

Non-Routine Task	Hazardous Chemical	Hazard(s)
Hot Tap	Gas, Oil, or petroleum product	Fire, explosion, asphyxiation, skin contact,

inhalation, absorption, eye contact

If it is determined that a hazardous condition exists with the non-routine task, employees performing the task will be provided with information that includes specific chemical hazards, safety measures or protective equipment the employee should use, and steps taken to reduce the hazards, such as ventilating, providing respirators, and implementing emergency procedures.

Employees will not be provided hazardous chemical information and training for such non-routine tasks unless it is determined through a hazard assessment that a hazardous condition exists. Upon request by an employee, the administrator will provide the employee with information about the hazardous chemicals that may be encountered during the non-routine activity.

10. Informing Other Employers or Contractors At Multiemployer Worksites

When worksites or projects involve employees of other employers or contractors, the administrator will provide them with information about hazardous chemicals that their employees may be exposed to on a jobsite and precautionary protective measures for their employees. The administrator will obtain information about hazardous chemicals used by other employers or contractors to which employees of this organization may be exposed.

Other employers and contractors will be provided with SDSs for hazardous chemicals introduced into the work area.

In addition to providing a copy of an SDS to other employers, other employers will be informed of necessary precautionary measures to protect employees exposed to operations performed by this organization.

Also, other employers will be informed about container labels used by the organization. Where labeling systems are used that are not the original container labels, the employees of other employers or contractors will be provided with information explaining the labels used for hazardous chemicals to which they may be exposed.

11. LIST OF HAZARDOUS CHEMICALS

A list of all known hazardous chemicals used in work areas is attached to this Plan and/or available on CD.

The list will include each chemical's product identifier (i.e., name or number used to identify the chemical), the manufacturer, the work area in which the chemical is used, dates of use, and quantity used. Detailed information about each chemical may be obtained from the chemical's SDS.

When new chemicals are received, the chemical list will be updated within 30 days. To ensure any new chemical is added to the list in a timely manner, the following procedures must be followed:

- Send original SDS to Corporate Safety for inclusion into the electronic database
- Updated CDs will be issued to each Division Safety Coordinator
- Each Division Safety Coordinator will place a copy in each of their respective job site SDS manuals.

The hazardous chemical list is compiled and maintained by the administrator. *[NOTE: The chemical list is arranged so that it can be cross-referenced with the SDS file system and the label system.]*

12. Chemicals in Unlabeled Pipes

Work activities are sometimes performed by employees in areas where chemicals are transferred through unlabeled pipes. Prior to starting work in these areas, the employees' supervisor should contact **[name]** for information regarding:

- The chemical in the pipes
- Potential hazards
- Required safety precautions

13. Antidiscrimination Policy

Each employee must be informed that the organization is prohibited from discharging or discriminating against employees who exercise their rights to obtain information regarding hazardous chemicals used in the workplace.

14. Attachments

HCS Vector Pictograms & Hazards

GHS HAZCOM

HCS Pictograms and Hazards

Health Hazard  • Carcinogen • Mutagenicity • Reproductive Toxicity • Respiratory Sensitizer • Target Organ Toxicity • Aspiration Toxicity	**Flame**  • Flammables • Pyrophorics • Self-Heating • Emits Flammable Gas • Self-Reactives • Organic Peroxides	**Exclamation Mark**  • Irritant (skin and eye) • Skin Sensitizer • Acute Toxicity (harmful) • Narcotic Effects • Respiratory Tract Irritant • Hazardous to Ozone Layer (Non-Mandatory)
Gas Cylinder  • Gases Under Pressure	**Corrosion**  • Skin Corrosion/ Burns • Eye Damage • Corrosive to Metals	**Exploding Bomb**  • Explosives • Self-Reactives • Organic Peroxides
Flame Over Circle  • Oxidizers	**Environment** (Non-Mandatory)  • Aquatic Toxicity	**Skull and Crossbones**  • Acute Toxicity (fatal or toxic)

GHS HAZCOM

LADDER SAFETY

1. Scope

This Procedure outlines the minimum requirements for Ladders. It can or may be used in lieu of CLIENTS own Ladders or in conjunction with it.

2. Purpose

The following requirements apply to all ladders as indicated, including job-made ladders.

- Ladders shall be capable of supporting the following loads without failure:
- Each self-supporting portable ladder:
- At least four times the maximum intended load, except that each extra-heavy-duty type 1A metal or plastic ladder shall sustain at least 3.3 times the maximum intended load.

The ability of a ladder to sustain the loads indicated in this paragraph shall be determined by applying or transmitting the requisite load to the ladder in a downward vertical direction. Ladders built and tested in conformance with the applicable provisions will be deemed to meet this requirement.

3. Portable Ladder

Each portable ladder that is not self-supporting: At least four times the maximum intended load, except that each extra-heavy-duty type 1A metal or plastic ladders shall sustain at least 3.3 times the maximum intended load. The ability of a ladder to sustain the loads indicated in this paragraph shall be determined by applying or transmitting the requisite load to the ladder in a downward vertical direction when the ladder is placed at an angle of 75 ½ degrees from the horizontal. Ladders built and tested in conformance with the applicable provisions of appendix A will be deemed to meet this requirement.

4. Fixed Ladder

Each Fixed ladder: At least two loads of 250 pounds (114 kg) each, concentrated between any two consecutive attachments (the number and position of additional concentrated loads of 250 pounds (114 kg) each, determined from anticipated usage of the ladder, shall also be included), plus anticipated loads caused by ice buildup, winds, rigging, and impact loads resulting from the use of ladder safety devices. Each step or rung shall be capable of supporting a single concentrated load of a least 250 pounds (114 kg) applied in the middle of the step or rung. Ladders built in conformance with the applicable provisions of appendix A will be deemed to meet this requirement.

5. Ladder Safety

Ladder rungs, cleats, and steps shall be parallel, level, and uniformly spaced when the ladder is in position for use.

Rungs, cleats, and steps of portable ladders (except as provided below) and fixed ladders (including individual-rung/step ladders) shall be spaced not less than 10 inches (25 cm) apart, nor more than 14 inches (36 cm) apart, as measured between center lines of the rungs, cleats and steps.

Rungs, cleats, and steps of step stools shall be not less than 8 inches (20 cm)

apart, nor more than 12 inches (31 cm) apart, as measured between center lines of the rungs, cleats, and steps.

Rungs, cleats, and steps of the base section of extension trestle ladders shall be not less than 8 inches (20 cm) nor more than 18 inches (46 cm) apart, as measured between center lines of the rungs, cleats, and steps. The rung spacing on the extension section of the extension trestle ladder shall be not less than 6 inches (15 cm) nor more than 12 inches (31 cm), as measured between center lines of the rungs, cleats, and steps.

The minimum clear distance between the sides of individual-rung/step ladders and the minimum clear distance between the side rails of other fixed ladders shall be 16 inches (41 cm).

The minimum clear distance between side rails for all portable ladders shall be 11 ½ inches (29 cm).

The rungs of individual-rung/step ladders shall be shaped such that employees' feet cannot slide off the end of the rungs.

The rungs and steps of fixed metal ladders manufactured after March 15, 1991, shall be corrugated, knurled, dimpled, coated with skid-resistant material, or otherwise treated to minimize slipping.

The rungs and steps of portable metal ladders shall be corrugated, knurled, dimpled, coated with skid-resistant material, or otherwise treated to minimize slipping.

Ladders shall not be tied or fastened together to provide longer sections unless they are specifically designed for such use.

A metal spreader or locking device shall be provided on each stepladder to hold the front and back sections in an open position when the ladder is being used.

When splicing is required to obtain a given length of side rail, the resulting side rail must be at least equivalent in strength to a one-piece side rail made of the same material.

Except when portable ladders are used to gain access to fixed ladders (such as those on utility towers, billboards, and other structures where the bottom of the fixed ladder is elevated to limit access), when two or more separate ladders are used to reach an elevated work area, the ladders shall be offset with a platform or landing between the ladders.

Ladder components shall be surfaced so as to prevent injury to an employee from punctures or lacerations, and to prevent snagging of clothing.

Wood ladders shall not be coated with any opaque covering, except for identification or warning labels which may be placed on one face only of a side rail.

LADDER SAFETY

The minimum perpendicular clearance between fixed ladder rungs, cleats, and steps, and any obstruction behind the ladder shall be 7 inches (18 cm), except in the case of an elevator pit ladder for which a minimum perpendicular clearance of 4 ½ inches (11 cm) is required.

The minimum perpendicular clearance between the center line of fixed ladder rungs, cleats, and steps, and any obstruction on the climbing side of the ladder shall be 30 inches (76 cm).

When unavoidable obstructions are encountered, the minimum perpendicular clearance between the centerline of fixed ladder rungs, cleats, and steps, and the obstruction on the climbing side of the ladder may be reduced to 24 inches (61 cm), provided that a deflection device is installed to guide employees around the obstruction.

Through fixed ladders at their point of access/egress shall have a step-across distance of not less than 7 inches (18 cm) nor more than 12 inches (30 cm) as measured from the centerline of the steps or rungs to the nearest edge of the landing area. If the normal step- across distance exceeds 12 inches (30 cm), a landing platform shall be provided to reduce the distance to the specified limit.

Fixed ladders without cages or wells shall have a clear width to the nearest permanent object of at least 15 inches (30 cm) on each side of the centerline of the ladder.

Fixed ladders shall be provided with cages, wells, ladder safety devices, or self-retracting lifelines where the length of climb is less than 24 feet (7.3 m) but the top of the ladder is at a distance greater than 24 feet (7.3 m) above lower levels.

Where the total length of a climb equals or exceeds 24 feet (7.3 m), fixed ladders shall be equipped with one of the following:

- Ladder safety devices; or
- Self-retracting lifelines, and rest platforms at intervals not to exceed 150 feet (45.7 m); or
- A cage or well, and multiple ladder sections, each ladder section not to exceed 50 feet (15.2 m) in length. Ladder sections shall be offset from adjacent sections, and landing platforms shall be provided at maximum intervals of 50 feet (15.2 m).

Cages for fixed ladders shall conform to all of the following:

- Horizontal bands shall be fastened to the side rails of rail ladders, or directly to the structure, building, or equipment for individual-rung ladders;
- Vertical bars shall be on the inside of the horizontal bands and shall be fastened to them;
- Cages shall extend not less than 27 inches (66 cm), or more than 30 inches (76 cm) from the centerline of the step or rung (excluding the flare at the

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bottom of the cage), and shall not be less than 27 inches (68 cm) in width;

- The inside of the cage shall be clear of projections;
- Horizontal bands shall be spaced not more than 4 feet (1.2 m) on center vertically;
- Vertical bars shall be spaced at intervals not more than 9 ½ inches (24 cm) on center horizontally;
- The bottom of the cage shall be at a level not less than 7 feet (2.1 m) nor more than 8 feet (2.4 m) above the point of access to the bottom of the ladder. The bottom of the cage shall be flared not less than 4 inches (10 cm) all around within the distance between the bottom horizontal band and the next higher band;
- The top of the cage shall be a minimum of 42 inches (1.1 m) above the top of the platform, or the point of access at the top of the ladder, with provision for access to the platform or other point of access.

Wells for fixed ladders shall conform to all of the following:

- They shall completely encircle the ladder;
- They shall be free of projections;
- Their inside face on the climbing side of the ladder shall extend not less than 27 inches (68 cm) nor more than 30 inches (76 cm) from the centerline of the step or rung;
- The inside clear width shall be at least 30 inches (76 cm);
- The bottom of the wall on the access side shall start at a level not less than 7 feet (2.1 m) nor more than 8 feet (2.4 m) above the point of access to the bottom of the ladder.
- Ladder safety devices, and related support systems, for fixed ladders shall conform to all of the following:
- They shall be capable of withstanding without failure a drop test consisting of an 18-inch (41 cm) drop of a 500-pound (226 kg) weight;
- They shall permit the employee using the device to ascend or descend without continually having to hold, push, or pull any part of the device, leaving both hands free for climbing;
- They shall be activated within 2 feet (.61 m) after a fall occurs, and limit the descending velocity of an employee to 7 feet/sec. (2.1 m/sec.) or less;
- The connection between the carrier or lifeline and the point of attachment to the body belt or harness shall not exceed 9 inches (23 cm) in length.

The mounting of ladder safety devices for fixed ladders shall conform to the following:

- Mountings for rigid carriers shall be attached at each end of the carrier, with intermediate mountings, as necessary, spaced along the entire length of the carrier, to provide the strength necessary to stop employees' falls;
- Mountings for flexible carriers shall be attached at each end of the carrier. When the system is exposed to wind, cable guides for flexible carriers shall be installed at a minimum spacing of 25 feet (7.6 m) and maximum spacing of 40 feet (12.2m) along the entire length of the carrier, to prevent wind

LADDER SAFETY

damage to the system.

The design and installation of mountings and cable guides shall not reduce the design strength of the ladder.

The side rails of through or side-step fixed ladders shall extend 42 inches (1.1 m) above the top of the access level or landing platform served by the ladder. For a parapet is continuous, the access level shall be the top of the parapet.

For through-fixed-ladder extensions, the steps or rungs shall be omitted from the extension and the extension of the side rails shall be flared to provide not less than 24 inches (61 cm) nor more than 30 inches (76 cm) clearance between side rails. Where ladder safety devices are provided, the maximum clearance between side rails of the extensions shall not exceed 36 inches (91 cm).

For side-step fixed ladders, the side rails and the steps or rungs shall be continuous in the extension.

Individual-rung/step ladders, except those used where their access openings are covered with manhole covers or hatches, shall extend at least 42 inches (1.1 m) above an access level or landing platform either by the continuation of the rung spacing's as horizontal grab bars or by providing vertical grab bars that shall have the same lateral spacing as the vertical legs of the rungs.

The following requirements apply to the use of all ladders, including job-made ladders, except as otherwise indicated:

- When portable ladders are used for access to an upper landing surface, the ladder side rails shall extend at least 3 feet (.9 m) above the upper landing surface to which the ladder is used to gain access; or, when such an extension is not possible because of the ladder's length, then the ladder shall be secured at its top to a rigid support that will not deflect, and a grasping device, such as a grab rail, shall be provided to assist employees in mounting and dismounting the ladder. In no case shall the extension be such that ladder deflection under a load would, by itself, cause the ladder to slip off its support.

Ladders shall be maintained free of oil, grease, and other slipping hazards.

Ladders shall not be loaded beyond the maximum intended load for which they were built, nor beyond their manufacturer's rated capacity.

Ladders shall be used only for the purpose for which they were designed.

Non-self-supporting ladders shall be used at an angle such that the horizontal distance from the top support to the foot of the ladder is approximately one-quarter of the working length of the ladder 4:1(the distance along the ladder between the foot and the top support).

Wood job-made ladders with spliced side rails shall be used at an angle such that

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the horizontal distance is one-eighth the working length of the ladder.

Fixed ladders shall be used at a pitch no greater than 90 degrees from the horizontal, as measured to the back side of the ladder.

Ladders shall be used only on stable and level surfaces unless secured to prevent accidental displacement.

Ladders shall not be used on slippery surfaces unless secured or provided with slip- resistant feet to prevent accidental displacement. Slip-resistant feet shall not be used as a substitute for care in placing, lashing, or holding a ladder that is used upon slippery surfaces including, but not limited to, flat metal or concrete surfaces that are constructed so they cannot be prevented from becoming slippery.

Ladders placed in any location where they can be displaced by workplace activities or traffic, such as in passageways, doorways, or driveways, shall be secured to prevent accidental displacement, or a barricade shall be used to keep the activities or traffic away from the ladder.

The area around the top and bottom of ladders shall be kept clear.

The top of a non-self-supporting ladder shall be placed with the two rails supported equally unless it is equipped with a single support attachment.

Ladders shall not be moved, shifted, or extended while occupied.

Ladders shall have nonconductive side rails if they are used where the employee or the ladder could contact exposed energized electrical equipment

The top or top step of a stepladder shall not be used as a step.

Cross-bracing on the rear section of stepladders shall not be used for climbing unless the ladders are designed and provided with steps for climbing on both front and rear sections.

Ladders shall be inspected by a competent person for visible defects on a periodic basis and after any occurrence that could affect their safe use.

Portable ladders with structural defects, such as, but not limited to, broken or missing rungs, cleats, or steps, broken or split rails, corroded components, or other faulty or defective components, shall either be immediately marked in a manner that readily identifies them as defective, or be tagged with "Do Not Use" or similar language, and shall be withdrawn from service until repaired.

Fixed ladders with structural defects, such as, but not limited to, broken or missing rungs, cleats, or steps, broken or split rails, or corroded components, shall be withdrawn from service until repaired. The requirement to withdraw a defective ladder from service is satisfied if the ladder is either:

- Immediately tagged with "Do Not Use" or similar language;

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- Marked in a manner that readily identifies it as defective;
- Or blocked (such as with a plywood attachment that spans several rungs).
- Ladder repairs shall restore the ladder to a condition meeting its original design criteria, before the ladder is returned to use.
- Single-rail ladders shall not be used.
- When ascending or descending a ladder, the user shall face the ladder.
- Each employee shall use at least one hand to grasp the ladder when progressing up and/or down the ladder.
- An employee shall not carry any object or load that could cause the employee to lose balance and fall.

Personal Protective Equipment

1. Scope

This Policy outlines the minimum requirements for Personal Protective Equipment (PPE). It can or may be used in lieu of, or in conjunction with the CLIENTS own Personal Protective Equipment program.

2. General

- When PPE is required to protect employees, it must be provided by the employer at no cost to employees, except for specific items that the employee is required to provide, such as:
  - Safety-toe footwear,
  - Prescription safety eyewear,
  - Everyday clothing and weather-related gear
- The Company Division Safety Coordinators are responsible for conducting Personal Protective Equipment hazard assessments for work exposures in their area of responsibility, refer to "PPE Hazard Assessment Certification Form". This assessment will be used as the foundation for determining personal protective equipment needs.
- Foremen / Supervisors are responsible for designating & insuring use of required PPE for work exposures in their areas.
- Employees are responsible for the proper use, cleaning, and storage of their assigned PPE.
- All PPE shall be the right size or fit properly for the employee wearing it.
- PPE must meet standards established by recognized governmental and/or industry groups and must be worn as intended by the manufacturer.
- Personnel handling chemicals or other agents must wear proper eye or face protection, respiratory protection, gloves, and aprons as specified.
- Defective or damaged personal protective equipment shall not be used.
- Additional eye/face protection – Two(2) forms of eye protection (such as goggles and face shields must be worn during grinding, welding, drilling, scraping, or any operation during which flying foreign objects may enter the eye.
- Failure to comply with Company policy concerning PPE can result in employee injury as well as OSHA citations and fines. An employee who does not comply with this program will be disciplined for noncompliance according to our Company Disciplinary Program

3. Mandatory PPE

- All employees, subcontractors, and visitors must wear the following protective equipment, at all times, when working in areas other than offices, parking areas or change rooms:
  - Hard hats
  - Steel-toed footwear
  - Safety glasses

- Additional protection may be required depending on the work scope and potential hazards. This equipment includes, but is not limited to the following:
  - Goggles and/or face shields (grinding, welding, drilling, scraping, chemical, brazing, cutting, or any operation where foreign objects may enter the eye)
  - Fire-resistant clothing (FRC)

Personal Protective Equipment

- Respirators
- Gloves, i.e., leather, cut resistant, hi-vis, and /or job specific, etc.
- Welders' jacket
- Arm protectors as appropriate
- Life jackets / Personal Flotation Device (PDF)
- Fall Protection / Full body harness & Lanyard

4. PPE Requirement for Main Yards and Shops

4.1 Mechanics, laborers, welders, and others when loading, unloading trucks or doing construction work in the main yard will wear the following:

- Leather, steel toed work shoes.
- Safety glasses.
- Hard hats.
- Approved gloves.

4.2 Mechanics, laborers, welders, and others when working in the main shop or repairing and maintaining equipment in the main yard will wear the following:

- Leather steel toed work shoes.
- Safety glasses, when grinding, cutting, etc.
- Approved gloves, when grinding, cutting, handling cable, etc.

4.3 Office personnel, sales people, and other visitors in the main shop and yard will not be required to wear Personal Protective Equipment unless they are within 30 feet of or involved in the loading or unloading of trucks or construction work. If they are within 30' or involved, they must wear the proper PPE.

4.4 The above policy is the minimum requirement. If an individual division wishes to require more stringent PPE rules they may do so. All personnel will be required to adhere to the individual division's policy

5. Eye Protection

- All employees are required to wear ANSI approved safety glasses (ANSI Z-87.1) with side shields to help prevent eye injuries.
- Both face shield and spoggle type safety glasses are the minimum requirement when performing grinding or other tasks that produce flying objects that may fly into face area, including those resulting from molten metal, liquid chemicals, acids or caustic liquids, chemical gases or vapors, or light radiation.
- Approved safety eyewear with side impact protection meeting ANSI Z-87.1 is to be worn in field operations and other designated areas.
- ANSI approved eyewear is to be worn over non-ANSI approved eyewear or any eyewear not having side impact protection.
- Filter lenses are required for arc welding or cutting.
- All employees who are required to wear side shield safety glasses/face shields must routinely inspect and properly care for their side shield safety

glasses/face shields.

6. Hand Protection

- All employees working in jobs where there is a potential for a hand injury are required to wear appropriate gloves to help prevent hand injuries cuts, burns, and chemical exposure.

6.1 Glove Type Identification Chart

Leather Gloves	Tasks that pose abrasion, cut, or impact hazards.
Cut Resistant Gloves	Tasks that pose puncture and cut hazards.
Mechanic's Gloves	Tasks that require dexterity and the likelihood of cuts or abrasions is minimal.
Chemical Resistant Gloves	Tasks for which the primary hazard is chemical contact with the skin. Refer to the MSDS for proper glove selection.
High-Vibration Gloves	Tasks that involve the use of electrical or pneumatic tools that cause vibration.
Welding Gloves	Welding, grinding, or work near high-temperature equipment.
Slip-Resistant Gloves	Tasks involving work with oily equipment, which usually requires minimal protection for abrasions or cuts.
Electrical Gloves	Tasks when working with voltages greater than 50 V AC.

- Electrical gloves meeting ASTM D120 and IEC 903 are to be provided when working with voltages greater than 50 VAC and replaced or tested every six months by an approved independent laboratory.
- Wearers of the lineman's gloves are to test for holes or leaks before each use.
- All employees who are required to wear protective gloves must routinely inspect and properly care for their gloves (if the gloves are not disposable).
- Defective or damaged gloves must not be used.
- Any glove found defective or damaged should be destroyed and replaced immediately.

7. Hearing Protection

- Hearing protection must be worn in designated high noise areas (85 dBA or higher).
- If the high noise area is determined to be 110 dBA or higher, dual protection (inserts and muffs) shall be worn.
- Additional information may be found in Company Hearing Conservation Program.

8. Head Protection

- All employees working job assignments are required to wear ANSI-Z89.2 approved hard hats to help prevent head injuries, including those resulting from falling objects, bumping the head against a fixed object, or electrical shock.

Personal Protective Equipment

- All employees required to wear hard hats must routinely inspect and properly care for their hard hats.

9. Foot Protection

- All employees working in designated work areas and / or job assignments are required to wear ANSI Z41.1-1999 or ASTM F2413- 2005 approved safety toe boots to help prevent foot injuries, ankle injuries, slips, and falls.
- Safety toe footwear is required at all times while on Company property further than 50 feet away from an office.
- Non-steel toed footwear is required when working on electrical systems.
- The Company may dictate the need for special requirements (i.e. defined heel, leather, canvas, etc.) as required by our Client.
- All employees required to wear foot protection must routinely inspect and properly care for their foot protection.

10. Proper Dress

- Loose-fitting clothing shall not be worn near moving machinery.
- The bottoms of trousers shall be taped or otherwise secured while working near rotating equipment whereby it may create a hazard.
- Workers must wear gloves whenever necessary. For more information, see Hand Protection.
- If clothing becomes saturated with oil, gasoline, or chemicals, personnel must change clothes immediately to prevent skin irritation.

11. Flame Resistant Clothing (FRC)

Fire retardant clothing (FRC) is required for use by certain clients, in certain areas, in certain job functions or tasks.

- Employees must wear only cotton clothing under FRC to reduce the possibility of steam burns or melting of their clothing material in case of a flashover.
- Employees will be issued FRC in an amount that meets the requirements of the job.
- Not all jobs or tasks require the use of FRC.
- Only those personnel that are required to perform tasks where there are fire hazards will be issued FRC.
- Division Safety and Construction Coordinators will review replacement of FRC.
- New FRC will not be issued until FRC to be replaced is turned in to Safety or Construction Coordinators.
- Maintaining and cleaning of FRC is the responsibility of the employee. Washing and care instructions are provided with the FRC. The clothing generally retains its fire retardant properties for approximately 50 washes or 18 months.

12. Personal Flotation Device (PFD)

All personnel shall wear a TYPE I, II or V life jacket fully buckled, snapped, or zipped whenever there is a hazard of falling into the water, regardless of the size of the boat, barge, or vessel. Specific instances where PFD's shall be worn are when:

- Performing personnel transfer over open water,
- Whenever personnel are moving about or performing a task alone on a vessel with unprotected edges or;
- Personnel are working outside of protective handrails or unguarded edges over open water.
- While a PFD is not required to be worn while an employee is inside an enclosed cab or equipment compartment on a barge, each employee should have a PFD accessible to them at all times. This safety precaution will allow employees the opportunity to don a PFD in a reasonable amount of time during an emergency (i.e., vessel sinking, fire, etc.).

Manufacturers' recommendations must be followed for the maintenance and care of the PFD.

13. Respiratory Equipment

The Company has established a written Respiratory Protection Program. Respiratory protection will be provided to all employees based on hazard exposure or a specific employee request.

- Any employee identified as needing or requesting respiratory protection for job responsibilities, must have a physician's or Licensed Health Care Professional's approval to wear a respirator, and be properly fit-tested annually.
- Respirators must fit properly to provide protection.
- All personnel wearing a respirator must be clean-shaven in the seal area of the respirator to ensure a proper fit and seal.
- The Company in accordance with this program will provide all respirators to the employees.
- Respirators shall be cleaned after each use and stored in a sealed plastic bag.
- The Company will perform a JSA of each job and determine if respirators are needed based on potential respiratory hazards in the work environment.
- Hazards that may require respirators are areas where the air is contaminated with harmful dusts, fogs, fumes, mists, gases, smoke, sprays, or vapors.

14. Fall Protection

This section contains the basic fall protection safety practices for employees when performing work tasks at heights greater than 6 ft (1.8 m) from the walking/working surface. Employees shall be trained in fall protection and fall arrest systems. Fall arrest systems must be used when other fall protection systems are impractical or insufficient.

Note: Fixed moveable platforms used on bridge cranes also require fall protection.

14.1 Fall Arrest Systems

Fall arrest systems shall include:

- A full-body harness with a D-ring on the back the back situated in-between the shoulders.between the shoulders
- An appropriate anchorage attachment capable of supporting at least 5,000 lbs

Personal Protective Equipment

- Connectors

Note: The system may include a lanyard deceleration device, lifeline, or suitable combination of these.

14.2 General Requirements

All employees, or their designated representatives, can obtain further information about this written program, and / or the fall protection standard from the Division Safety Coordinator.

- Employees shall not work alone when using personal fall arrest equipment.
- A rescue plan shall be developed and communicated to all effected persons prior to using fall arrest systems. Rescue equipment must be readily available at the work site.
- Before donning the fall arrest system the employee shall inspect fall arrest components prior to each use and remove from service and destroy damaged components or equipment that have been subjected to a fall.
- The use of waist belts for fall arrest and non- locking snap hooks is prohibited.
- Fall Arrest equipment is not to be used to hoist equipment/materials.
- If an employee is working in an area where he/she could fall into and be submerged in water, an approved type 1 or type 2 life jacket or buoyant work vest must be worn and at least one life saving skiff or boat should be immediately available.
- In order to obtain 100% fall protection while performing elevated work, it may be necessary to use two lanyards to allow the employee to remain anchored to one point while moving to the next point.

15. PPE Care, Training & Maintenance

Care and maintenance of PPE is an important training issue. PPE is sometimes the only barrier between employees and workplace hazards that can injure, or kill. PPE that isn't properly maintained is likely to become worn or damaged. PPE that isn't in good condition can't properly protect employees from hazards. All PPE training is documented with employees name and the date of training.

Training should be conducted on the Company PPE program, as well as the Company and employee roles and responsibilities pertaining to PPE. Additionally, employee should be knowledgeable as to where to go for the the assignment of PPE.

Each affected employee must demonstrate an understanding of 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.

Employees who use ***head*** protection should be trained to:

Personal Protective Equipment

- Clean hard hats regularly with warm water and soap, and allow to air dry.
- Store head protection out of the sun, away from extreme temperatures, and in a safe place where it can't get knocked around and damaged.
- Check the headband to make sure that it isn't stretched or worn and that the hat fits comfortably on the head.
- Replace a hard hat if it is cracked, dented, or has taken a heavy blow.

Employees who use ***eye*** protection should be trained to:

- Clean safety glasses and goggles regularly with mild soap and water.
- Wash lenses with water before wiping to prevent scratching. (If employees don't have access to clean water, tell them to blow dust and grit from lenses before wiping.)
- Store eye protection where it won't get scratched or otherwise damaged.
- Replace safety glasses if frames are bent, and replace goggles if headbands are loose, twisted, knotted, or worn. Replace any kind of eye protection if lenses are scratched or pitted and impair vision.

Employees who use ***hearing*** protection should be trained to:

- Wipe earmuffs with a damp cloth after each use, store them in a safe place, and replace cushions when they lose their resilience.
- Wash reusable earplugs every day, store them in a clean case, and replace if plugs are hard or discolored.
- Wipe canal caps (headband plugs) with a damp cloth after each use, store them in a safe place so the headband won't get bent or twisted, and replace if the band is damaged and no longer fits comfortably.

Employees who use ***respirators*** should be trained to:

- Clean and disinfect them according to manufacturer's instructions.
- Check for holes, cracks, deterioration, and any other problems that could interfere with the effectiveness of protection.
- Store in a safe location, protected from dust, light, heat, cold, moisture, and chemicals.
- Place the respirator so that rubber and plastic parts are in a normal position and hold their shape.

Employees who use ***hand*** protection should be trained to:

- Keep gloves clean and dry.
- Have a backup pair in case gloves get wet.
- Check for holes, cracks, and other damage before each use.
- Replace worn or damaged gloves right away.

Employees who use ***foot*** protection should be trained to:

- Wipe wet or soiled shoes with a clean cloth or paper towel.
- Air out work shoes after work, and check regularly for signs of damage or wear.
- Have worn or damaged shoes repaired, or replace them.
- Change socks to keep feet and shoes dry if feet sweat a lot.

Employees who use ***additional*** **PPE** protection should be trained to:

Personal Protective Equipment

- Manufacturers' recommendations must be followed for the maintenance and care of the PFD.

16. PPE Hazard Assessment Certification Form

- Refer to separate file for current Form.
- The hazard assessment shall be certified by the person who completed the hazards assessment and the date the assessment was completed.
- Form must be filled out by the respective Division Safety Coordinator each year for each work area.
- All completed forms must be kept on file at the respective Division Office.

SPILL PREVENTION & RESPONSE

1. Scope

This Procedure outlines the minimum requirements for the Company's Spill Prevention & Response. It can or may be used in lieu of Clients own Spill Prevention & Response program or in conjunction with it. A job specific Spill Prevention & Response Plan can be prepared, as required by regulation or Client request.

2. Training

The Company instructs its personnel in the operation and maintenance of equipment to prevent the accident discharge or spill of, oil and lubricants. Personnel are also made aware of the pollution control laws, rules and regulations applicable to their work.

Employees are instructed on the proper response procedures for spilled materials. The training includes materials available for use, proper waste disposal, and communication procedures.

Spill prevention briefings are scheduled and conducted by the Company at intervals frequent enough to ensure adequate understanding of this plan. These briefings highlight and describe the following:

- Possible equipment failure or malfunction;
- Precautionary measures;
- Standard operating procedures in case of a spill; and
- Equipment, materials and supplies used in clean-up of a spill.

3. Equipment Inspection and Maintenance

The Company performs scheduled inspection and maintenance of fuel, lubrication equipment, and chemical storage areas. Areas where chemicals may be used or stored are maintained using good housekeeping best management practices. This includes, but is not limited to, clean and organized storage, labeling, and secondary containment where necessary.

The inspection and maintenance of equipment includes regular examination to assess general equipment condition of all containers, valves pipelines and hoses. The examination observes signs of deterioration, which might cause a spill, and signs of accumulated fluid indicating leakage. All leaks are promptly corrected.

4. On-Site Operations

4.1 Refueling Operations

The Company ensures that all equipment refueling and lubrication is conducted to prevent accidental spills or discharges. As a result, such refueling operations shall take place within the right-of-way and at least 100 feet away from all water bodies and wetlands unless it is impractical due to circumstances such as the following:

- Locations, such as on rugged terrain or steep slopes, where movement of equipment to refueling stations would cause excessive surface disturbance to the right-of-way.
- When removal of equipment from a wetland would result in additional adverse impacts to the wetland.

SPILL PREVENTION & RESPONSE

- Construction sites were movement of equipment to refueling stations from pre-fabricated equipment pads is impractical.
- Locations where the water body or wetland is located adjacent to a road crossing.
- Where flotation equipment is used, refueling will occur at designated docking locations.
- Refueling of immobile equipment including, but not limited to, bending and boring machines, air compressors and padding machines.
- Refueling shall not take place within 100 feet of any known potable water wells.

4.2 Preventative Measures

The Company ensures that preventative measures during refueling or other operations, which may result in discharges, or spills address the following considerations.

Preventative measures equipment are sufficient to prevent discharged fluids from leaving the right-of-way, reaching wetlands or water bodies and are readily available for use. These measures include some combination of the following:

- Dikes, berms or retaining walls sufficiently impervious to contain spilled oil;
- Quantity of sorbet and barrier materials determined by the Company to be sufficient to capture the largest reasonable foreseeable spill;
- Quantity of disposable drums or containers suitable for holding and transporting contaminated materials;
- Curbing;
- Culverts, gutters or channeling systems;
- Weirs, booms or other barriers; or
- Spill diversion or retention ponds.

4.3 Spill Preparedness and Response

Prior to construction emergency spill kits will be on location. Spill kits are located on all fuel trucks. A proper spill kit must contain the appropriate supplies for materials that may be spilled. Supplies must be easily accessible when required, and considerations must be made for both the type and quantity of materials.

The Chief Inspector shall be responsible for defining the duties and coordinating the response of all persons involved in clean up of a spill.

5. Mitigation Measures – Standard Operating Procedure

5.1 Containment – Containment is the immediate priority n the case of a spill. A spill shall be contained on Company property or right-of-way, if possible.

5.2 Clean Up – Once a spill is contained, clean up procedures shall begin immediately. In no case shall containment equipment be used for the storage of contaminated material.

5.3 Notification – In the event of a spill the Chief Inspector implements the communication procedure to report any and all spills, regardless of size, to

SPILL PREVENTION & RESPONSE

construction supervisors, Company contacts, and regulatory agencies, if required, immediately upon learning of a spill. All spills are reported, regardless of size.

5.4 Sampling - If spill enters a body of water (ditch or larger), representative samples shall be taken in clean glass jars by the company upstream and downstream from the point of entry and refrigerated.

5.5 Excavation and Disposal

Small Spills – If the Chief Inspector determines that a spill is small enough and of the type of material that can be safely handled by the construction crew, the crew shall utilize construction equipment to containerize all spilled material, contaminated soil and sorbet material in a manner consistent with spilled material's characteristics.

Larger Spills – If the Chief inspector determines that the construction crew itself cannot adequately address a spill, waste specialists shall be called in by the Company to handle those activities. The Chief Inspector will ensure that all excavated wastes and other contaminated materials are transported to a disposal facility licensed to accept such materials.

5.6 Reporting

Following a spill, the Company shall immediately prepare a Construction Site Spill report form which shall be given to the Supervisor in charge of job. A copy will be kept on job. The form shall include the following details of the incident:

- Date and time of occurrence.
- Material spilled.
- Quantity spilled.
- Circumstances causing spill.
- Bodies of water involved or potentially involved.
- Is sheen present?
- Size of affected area.
- Estimated of the depth that material has spread in water or on soil.
- Will the spill progress off Company property or right-of-way?
- Is it under control?
- Has clean up begun and what methods are being or will be used?
- Names of first observer and any others observing the incident.

6. Storage and Clean-Up Equipment

6.1 Land Construction

The following is things that may be needed during a spill:

- Sorbents including pillows, socks and wipe sheets for containment and pick-up of spilled liquids;
- Commercially available spill skirts (or the functional equivalent thereof), self-contained and pre-packaged with materials to contain a large variety of sorbents for small to large spills;
- Utilization or creation of structures such as gutters, culverts and dikes for immediate spill containment, where available and appropriate;
- Shovels, backhoe, etc. for excavation of contaminated materials;

SPILL PREVENTION & RESPONSE

- Sumps and collection systems;
- Drums, barrels, temporary storage bags to clean up and transport contaminated materials;
- Absorbent pads or mats (quantity must be sufficient to capture largest foreseeable spill, e.g. crankcase capacity) for routine maintenance and refueling; and,
- Small sorbet kits (or functional equivalent) capable of absorbing up to five gallons of liquid, that can be stored on construction equipment.

6.2 Stream and Wetland Crossing

For each stream and wetland crossing, certain other equipment should be available in addition to that needed for land construction. This equipment should be stored close to the water or wetland to minimize response time. The minimum additional equipment is:

- Oil containment booms and the related equipment needed for rapid deployment; and
- Equipment for the removal of oils from water such as oleophilic and hydrophobic absorbent booms and mats, or mechanical skimmers.

6.3 Fuel, Lubrication Oil, and Chemical Storage

The storage of fuels and lubricating oils create the potential for large spills. When parking fuel trucks or loading oil barrels consideration shall be given to containment and clean up in case of a spill. Containment equipment shall be kept close to tanks and barrels so response time in the event of a spill can be minimized.

Chemical substances should be stored in proper containers to minimize the potential for a spill. Whenever possible, chemicals should be kept in closed containers and stored so they are not exposed to stormwater.

6.4 Routine Maintenance and Refueling

Prevention is the preferred alternative in the control of common spills that often occur during the changing of crankcase oil, repairing of hydraulic lines, addition of coolants, etc. Absorbent pads and mats, available from a number of supplies, shall be place on the ground beneath equipment before refueling and maintenance. Maintenance personnel shall carry sorbent materials to each piece of equipment.