

COMPANY

Guidelines for

Contractor Safety

COMPANY Contractor Safety Handbook

Inside front cover:

COMPANY Health and Safety Policy

It is the policy of COMPANY to provide each of its employees with a healthful and safe work place. Preventing occupational illness and injury is a major objective and is consistent with a strong health and safety culture supporting world class manufacturing and quality objectives. Health and safety will be given equal importance with production, quality and all other facility functions. COMPANY will be a recognized industry leader in health and safety.

Facility management and supervision are responsible and accountable for the implementation of this policy. Each employee must observe and abide by all established safety rules and practices, and use appropriate safety equipment to ensure personal safety. In addition, each employee is responsible for reporting all injuries, illnesses, unsafe practices and unsafe conditions.

We will comply with all applicable health and safety regulations. We will establish uniform health and safety guidelines to be followed worldwide. Any condition or work practice which is not in compliance, or which is considered potentially hazardous, is unacceptable and must be reported at once to supervisory personnel. Appropriate action will be taken to ensure a timely and effective correction.

COMPANY Environmental Policy

COMPANY will conduct its business with respect and care for the environment. Environmental excellence is consistent with COMPANY's business strategy: To be a leader in the clinical diagnostic industry.

We will:

- Meet or exceed applicable environmental regulations and corporate policies.
- Conserve natural resources and minimize the environmental impact of our operations, products and services.
- Participate in local, state and Federal environmental initiatives.
- Establish a goal to continuously improve our environmental performance by setting specific objectives, measuring our progress and communicating the results of our efforts.

This policy will be communicated to all employees and contractors. Success of the environmental program requires the personal commitment of all employees.

The information in this Handbook should be used as guidelines and are not intended to supplant acceptable industrial best practices. Contractors shall comply with other safety requirements as required by the facility, local, state, provincial, or federal laws and environmental protection requirements. All projects must be reviewed with the Facility Representative as part of the Pre-Work Review.

Safety is a vital part of your work at this facility:

- Think safety before you start your work
- Perform safely as you work
- Leave your work area in a safe condition

COMPANY

Contractor Safety Handbook

Draft

A) Introduction

Work related incidents can damage property, cause serious injury and death. With up-to-date training, safe work practices and good communication, **all incidents are preventable**.

This booklet addresses information pertinent to the safety and conduct of contractors doing work for Company. It obviously cannot cover every situation and is not intended to do so! This is however, a summary of the minimum expectations and in no way replaces existing laws, codes, rules, best industry practices and good common sense. Each job presents challenges that require special alertness, awareness and good judgment on your part.

Your Facility Representative is your primary contact should you have any questions about your work at this COMPANY facility.

Expectations:

Every contractor will:

1. Receive a copy of this handbook.
2. Receive site specific training.
3. Observe the facility safety rules and comply with local, state and federal regulations.

To assist with compliance, Safety Audits will be conducted of the worksite. Any unsafe conditions will be corrected and/or reported immediately to your Forman and the Facility Representative.

B) Policy

The contractor shall take all precautions to prevent, and assumes responsibility for the safety, health and environmental protection with respect to: (a) its work; (b) those persons performing, and who may be affected by, the work; and (c) Company Property, as it may be affected by the work.

We are committed to providing each employee and contractor with a safe and healthy workplace. We are convinced that you too are interested in the same as part of your overall performance. Every reasonable effort will be made in the interest of safety, fire prevention, and health preservation. We ask you to correct unsafe acts, practices and/or conditions for the protection of yourself and others. It is important that you understand the scope of your job; and that you complete it in a safe manner; and if you do not know, stop and ask before you continue. No job is so important that we can't take a few minutes to ensure that we work safely. While safety is of the utmost importance, quality, production, service and compliance with environmental laws are all essential. A proper balance of these criteria in each individual's personal performance must be met for the successful operation of our business.

Drug testing may be required (*except where prohibited by state or local laws*) for contractors. Implementation of this provision will be at the discretion of the Facility Management.

C) Definitions

Barricade, Warning - Alerts personnel to a hazard but offer no physical protection.

Barricade, Protective - Alerts personnel to a hazard as well as protect them from the hazard with a physical barrier.

Biohazard – Any and all human/primate blood and body fluids or products derived from human/primate blood and body fluids.

Company Property - Includes the facility owned or leased by COMPANY and all lockers, desks and other equipment used by employees that is authorized for use consistent with their job duties. Company property also includes any off-site storage areas, company-owned vehicles, parking lots and surrounding grounds.

Confined Space - Enclosure having limited openings for entry and exit; has unfavorable natural ventilation that could contain or produce dangerous air contaminants; is not designed for continuous human occupancy. Confined spaces include, but are not limited to, storage tanks, process vessels, pits, silos, vats, reaction vessels, boilers, ventilation and exhaust ducts, sewers, tunnels, underground utility vaults, pipelines, towers and similar structures.

Contractor - An individual or firm who is not an employee of COMPANY who performs work or provides service. For the purposes of contractor safety, all subcontractors will be treated as contractors.

Contractor Supervisor – An individual whom the contractor designates to carry out the contractor's supervisory, statutory, and contractual obligations, and to represent the contractor at the work site.

Electrical Hot Work - Any work that involves intentional physical contact using hands or tools (*except for approved test equipment*) with exposed energized electrical where the voltages are greater than 50 volts.

Electrical Proximity Work - Any work performed near exposed and unguarded energized electrical systems where tools, equipment, hands etc., could come in contact with live circuits greater than 50 volts.

Excavation - A Trench made below the surface of the ground. In general, the depth is greater than the width, but the width of a trench (measured at the bottom) is not greater than 15 feet (4.6 m).

Exposure Control Plan – A written document designed to eliminate or minimize employee exposure to biohazards.

Facility Representative - Individual(s) responsible for ensuring that contractors are aware of our expectations regarding health and safety while performing work on company property.

Fall Prevention - The elimination of a fall hazard. Fall prevention where is achievable is always preferred over fall protection techniques.

Fall Protection - A series of steps taken to minimize exposure to a fall hazard such as reducing fall distance and exposure time in conjunction with the use of fall arresting equipment.

Hot Work - Includes Burning, Welding, Cutting, Grinding or any task that produces an open flame, sparks or significant heat.

Incident - An unexpected, unplanned event resulting in an injury, property or material losses and/or business interruption.

MSDS / SDS - Material Safety Data Sheet / Safety Data Sheet - A technical publication that describes the safe handling, storage, and disposal of a hazardous material. It gives details on chemicals and physical dangers, safety procedures, protective equipment, and emergency response techniques. A data sheet, plus the safety equipment required, must be available to anyone handling the material. An MSDS / SDS must be supplied for every chemical brought onto the facility.

D) General Information

Biosafety

Many facilities work with Biohazardous Material. Before working in a Biohazardous Area the contractor must receive training in the site Exposure Control Plan for Bloodborne Pathogens. Training and vaccination programs need to be provided prior to commencing work.

Cameras -

Cameras are not permitted on site without prior approval of the Facility Representative.

Compressed Air -

When using compressed air for cleaning purposes, ensure pressure does not exceed 30 psi. Use monogoggles or a faceshield over approved safety glasses for this application. Do not use compressed air to dust off your body.

All hoses exceeding 1/2 inch ID shall have a safety device at the source of the supply or branchline to reduce the pressure in case of hose failure.

Confidentiality -

All manufacturing processes and company operations are considered confidential. Contractors and their employees must not discuss anything observed while on company property with anyone outside the company. No one is permitted to take photographs, videotapes, audiotapes, sketches or samples from anywhere on company property without prior permission from the Facility Administrator.

Equipment -

All the necessary tools and equipment, including personal protective equipment, shall be properly maintained and shall be appropriate for the safe accomplishment of the task. Further, only employees who have been properly trained and qualified to use the tools and equipment safely shall use such equipment. The Facility Representative retains the right to refuse or restrict the use of tools, equipment or chemicals on Company Property.

Housekeeping -

Good housekeeping is essential in maintaining a clean and safe workplace. Everyone is responsible for housekeeping. Scrap, trash and other wastes go in designated containers. Waste chemicals must be handled according to established site guidelines. Chemicals must never be discarded with the ordinary trash, disposed on the open ground or discharged down any drains. Work areas will be cleaned up continually as the job progresses, with cords and hoses routed and taped down across walkways in a manner that will not present a tripping hazard. Materials, tools and equipment shall be stored in a stable position (*tied, stacked or chocked*) to prevent rolling or falling. A safe access to/from all work areas must be maintained.

Inspections -

All work areas will be checked periodically to ensure safe work conditions, and at the end of each shift to insure that all flames are extinguished and other hazards are properly contained.

Lifting -

Never attempt to lift more than can be safely handled. Consider size, shape, weight and position during the lift. Get help when needed. Back belts and supports provide little support and should not be used as a substitute for proper lifting techniques.

Medical -

Site medical facilities on Company Property will be available only in emergency situations in which the severity of the injury requires immediate attention. Report all job-related injuries and hazardous material exposures to the Facility Representative.

Pedestrians -

Pedestrians always have the right of way. Pedestrians should use walkways when ever possible. If walkways are not provided, pedestrians should walk on the left side of the road facing oncoming traffic.

Pipeline Testing -

New and repaired piping shall be tested in accordance with a procedure furnished by Facility Representative.

Personal Protective Equipment (PPE)

General

Proper dress is expected and includes sturdy work and/or safety shoes, long pants (shorts may be worn with prior approval from the Facility Representative) and shirts (shirts with cartoons or pictures, which contain “double meanings”, are not permitted). Jewelry, dangling pierced earrings, long neck ties, and chains shall not be worn near moving machinery or near electrical / mechanical construction work. Loose-fitting clothing, long ties, long hair and beards shall be tied back, tucked in or secured when working on or near moving machinery or equipment.

Whenever the possibility exists that exposure to any chemical poses a health threat, proper personal protective equipment as specified on the MSDS or SDS shall be worn.

Head & Scalp

When head protection is necessary, approved hardhats shall be worn with the bill forward, in areas where a head-bumping hazard is present or overhead work is going on.

Eyes

When eye protection is necessary, approved safety glasses with side shields must be worn at all times on the job. Sunglasses must not be worn indoors. There may be times when goggles or full-face shields (worn over safety glasses) should be worn for eye protection

Ears

Hearing protection shall be worn in areas where noise levels exceed 90 dBA, or where exposure to 85 - 90 dBA exceeds 8 hours per day.

Hands & Wrists

Gloves prevent hand injuries. Gloves shall be used when they can prevent hand injuries. Glove charts shall be consulted to ensure that the proper glove is selected for the particular protection necessary

Legs & Feet

Safety shoes are recommended whenever foot hazards may exist in the workplace.

Chemically Resistant boots shall be worn when exposure to chemicals is present.

Foot guards shall be worn when using a jackhammer, tamper or similar equipment

Shin guards, chaps, spats etc., should be worn when using equipment such as chainsaws and brush hooks and where snakebites are possible.

Respiratory

Special jobs/areas may require the use of respiratory protection.

All individuals required to wear a respirator need to be:

- Clean shaven in the sealing area between the respirator and face.
- Instructed in the use, care and storage of respiratory protection devices.
- Medically approved to wear a respiratory protection device.

Radios -

Use of portable radios, audio tape decks, television sets and other similar equipment is not permitted within Company Property unless approved by the Facility Representative. The wearing of headphones or earphones is prohibited, except as part of communication equipment.

Running -

Running is generally not permitted on site except during an emergency.

Security -

Contractor activities are governed by the terms of their contracts. In general, the following guidelines apply regarding security measures.

- Contractor personnel need to remain in their own work area.
- Contractors will sign in and out at the when entering or exiting Company Property, where required by site specific rules.
- Facility Management reserves the right to inspect or search for hazards or unauthorized substances. Searches may be performed within, but are not limited to: lunch boxes, brief cases, purses, tool boxes, backpacks and vehicles.

Site Entry -

Personnel, equipment and materials shall enter and exit Company Property through the designated location. Site specific sign-in and pass procedures shall be followed. All contractors working on Company Property shall attend a site-specific safety orientation.

Smoking -

Smoking is permitted only in approved areas. Smoking materials will be disposed of in approved containers.

Two - Way Radios (walkie-talkies) -

Two-way radios, cell phones and other electronic equipment shall not be used on Company Property without the approval of the Facility Representative. Electronic equipment shall not be used in hazardous areas (*Class 1, Division 1 or 2*) unless they are intrinsically safe.

Working Alone

Any contractor engaging in hazardous work shall have a second person in the area (close enough to provide assistance) that is familiar with the job and the hazards involved.

E) Emergency Procedures

To summon help for Injury, Fire, Rescue or Chemical Spill

Call the facility emergency phone number. Be prepared to give the Operator / Security:

- Your Name
- Location of Emergency
- Nature of Emergency
- Injured Persons
- Phone Number of Phone You are Calling From

Do not hang up until the operator or security has an opportunity to ask questions.

Fire and/or Evacuation Alarms (audible and/or visual signal) or fire condition

- Stop all work, shut down all equipment, suspend all Hot Work and secure the job site.
- Evacuate the area and report to the designated rally point in accordance with the site evacuation plan.
- Do not return to work until authorized by the Facility Representative.

Medical Emergencies - All Company Properties have emergency procedures for summoning medical assistance during a medical emergency. The medical emergency response plan for the site will be utilized in emergency situations in which the severity of the injury requires immediate attention.

Chemical Emergency - If you experience a chemical splash in your eyes or on your skin, immediately flush the affected area with cool water for 15 minutes. Remove any contaminated clothing as you flush. Have someone else call the emergency phone number.

F) Injuries and Incidents, Major and Minor

All job-related injuries, incidents, hazardous material exposures, near misses and unsafe conditions occurring on the worksite shall be reported to the Facility Representative as soon as practical.

Minor - First Aid - All contractors are required to maintain their own first aid medical administration

Major – First Aid – See Medical Emergencies

G) Fire Protection

Construction materials or other equipment shall not be placed on or suspended from any fire protection piping, valves or supports.

Fire Protection Systems Impairment

Many different types of fire protection systems are in service. When they are temporarily impaired for repairs or modifications, a shutdown will be coordinated through the Facility Representative. A shutdown permit must be completed. Whenever possible, fire protection systems should be restored at the end of the workday.

Fire Extinguishers

An appropriate number and size of fire extinguishers will be maintained within the work area. One 2-A:40-B:C (*as a minimum*), UL-rated, fully charged fire extinguisher will be maintained by the Contractor and shall be within 30 feet (*10 meters*) of any welding, burning or open flame. All Contractor personnel will know the location and how to operate the extinguishers.

H) Conduct & Dress

1. All personnel are expected to conduct themselves in a professional manner and in accordance with site policies.
2. Loud or abusive language is not permitted.
3. Sexual, racial, religious or age harassment will not be tolerated.
4. Horseplay is strictly forbidden
5. Alcohol, illegal drugs, or individuals appearing intoxicated or under the influence of judgment impairing substances are not permitted on Company Property. The sale, possession, use or transfer of illegal, synthetic or designer drugs and drug-related paraphernalia is strictly prohibited and can lead to being barred from future work.
6. Weapons (*firearms, illegal knives, and explosive devices*) are not permitted on site.

I) Operational Safety

Aerial Lifts

This section refers to extendable boom platforms, Articulating boom platforms, Vertical manlifts and/or the combination of any such devices.

1. The Facility Representative must approve the use of such equipment. The area around the lift shall be barricaded while in use.
2. Only trained / authorized persons shall operate such devices.
3. Lift controls shall be tested each day before use.
4. Employees shall stand firmly on the floor of the platform and will not over reach the work area.
5. Employees will utilize fall protection securely attached to an adequate anchorage point in the basket, while working in the platform. Belting off to an adjacent pole or structure is not permitted.
6. Platform load limits shall be visible and never exceeded.
7. When in use, the brakes shall be set, and chocks used when on an incline. Outriggers shall be used when recommended by the manufacturer.
8. The aerial lift should not be moved when the boom is elevated in the working position with workers in the basket.

Barricades

Types of Barricades

Warning barricades - call attention to a hazard but offer no physical protection. Examples: yellow and black tape on stands or posts, and plastic or wooden snow fence.

Protective barricades - warn as well as provide physical protection and shall be able to withstand 200 lb. of force in any direction with minimal deflection. Examples: wooden post and rail, cable, wooden post and chain, plywood wall.

General

Barricades are required around work areas, including areas beneath concrete slab floors that are being drilled or hammered, grating floors, excavations, holes, and openings in floors, roofs, and elevated platforms, around overhead work; and whenever necessary to warn people of falling or tripping hazards.

1. Barricades shall be at least 42 inches high and maintained in an orderly fashion.
2. Warning barricades do not physically protect anyone from a hazard; therefore, this type of barricade shall be placed 5 to 6 feet or more away from the hazard to prevent anyone from falling into the hazard.
3. Barricades shall be erected before a hole is started and extended as the excavation progresses.
4. Barricades shall be removed when the work is complete.
5. Blinking lights shall be used on road closures after dark.
6. An access open or "gate" should be provided to allow safe access to the work site.
7. Barricades shall be properly identified.

Compressed Gas Cylinders

1. Valve protection caps shall be in place when cylinders are transported, moved or stored.
2. Cylinder valves shall be closed when not in use or moved.
3. Cylinders shall be secured in an upright position to an adequate support.
4. Regulators shall be in proper working condition.
5. Each cylinder shall be permanently and clearly marked to identify what type of gas it contains.
6. Tags should be used to identify cylinders that are "full", "in use" or "empty".
7. Oxygen cylinders shall be separated from flammable gas cylinders by at least 20 feet or by a one-hour firewall at least 5 feet high.
8. All compressed gas cylinders except compressed air shall be stored in a well-ventilated area.

Confined Spaces

Certain jobs may require individuals to enter and work in a confined space. A permit is required when working in a pit, tank or any other confined space greater than four feet in depth.

1. The individuals conducting the confined space entry will comply with the site Confined Space Entry Procedure.
2. Everyone involved with the entry (entrant, entry supervisor and safety attendant) shall be properly trained in confined space entry.
3. No individuals shall enter a confined space without a permit.
4. The individuals entering the confined space need to witness the atmospheric tests to confirm they have been done properly and all necessary safety precautions have been taken.

Electrical Safety

Temporary or Portable Equipment

1. Portable electrical equipment and tools shall be grounded or "double insulated".
2. Ground fault circuit interrupters (GFCI's) shall be used on all extension cords and portable electrical tools.
3. Before adjustment, servicing, or repair of electric tools, electric cords shall be unplugged. In some cases the tool or equipment may need to be "locked-out".

Electrical Hot Work

Electrical Hot Work is NOT ALLOWED without approval from the Facility Representative. In some cases a special permit must be obtained.

Electrical Proximity Work

Electrical Proximity Work should be avoided. When necessary, a barricade must be erected at least 3 feet from the exposed electrical equipment. It may be necessary to obtain permission from the Facility Representative.

Excavation Work

Any work that involves trenching, digging, tunneling, and concrete or blacktop saw cutting shall be considered as Excavation Work and will require a permit. All excavations require a “competent person” to review the work. Before any excavation begins the existence and location of underground utilities will be determined by the Facility Representative.

1. A warning or protective barricade shall be provided around every excavation and surrounding work area.
2. Excavated materials shall be piled at least three feet back from the edge of the excavation.
3. Every excavation shall have a means for safe access and egress.
4. Excavations shall be shored and/or sloped, and inspected before being entered.
5. All excavation walls shall be reinspected after a heavy rain or thaw. Shoring shall be checked daily, or more often in extremely wet weather.
6. No one is permitted in an excavation while equipment is working near the edge.
7. All trenches shall be backfilled as soon as practical after work is completed.

Fall Protection

Fall prevention and fall protection are two terms frequently used to explain the means to control fall hazards. However, fall prevention and protection are different and should be considered separately. Proper fall prevention eliminates a hazardous situation and therefore removes the chance of employee exposure to a fall. Fall protection recognizes that a hazardous condition can not be fully or adequately eliminated, therefore fall arrest equipment and procedures are needed

To be effective, fall prevention must be initiated in the construction-planning phase with a close study of operations and tools having fall hazard potential. The basic idea is to map out effective ways to get rid of the fall hazards and minimize the need for fall arrest equipment.

Fall protection is using fall arrest equipment to minimize the detrimental effects of a fall once it occurs. When fall arrest equipment is utilized, employee training must be provided to insure proper use. Fall arrest systems shall consist of a full body harness, shock absorbing lanyard, self-locking snap hooks and adequate anchorage points.

1. Fall prevention equipment such as handrails, midrails and toekicks shall be capable of withstanding a force of at least 200 pounds of force applied in any direction.
2. Anchorage points used for the attachment of personal fall arrest systems shall be capable of supporting at least 5000 pounds per worker.
3. Fall arrest systems shall be rigged in such a manner that a worker can neither free fall more than six feet nor contact any lower level.
4. The attachment point of the full body harness shall be located in the center of the user’s back near the shoulder level. Waist belts are not permitted.
5. Personal fall arrest systems and components subjected to impact loading shall be removed from service and inspected by a competent person to be suitable for use.
6. Personal fall arrest system components shall be inspected prior to each use for wear, damage, and other deterioration and defective components shall be removed from service.

Hazardous Materials

Chemical Lists, MSDS / SDS

1. Each facility maintains a list of chemicals used at their location, MSDS’s or SDS’s and a site written program for communication. All personnel shall be familiar with the site program and chemicals.
2. Contractors will provide a list of all chemicals and their corresponding Material Safety Data Sheets or Safety Data Sheets that will be used at the facility to the Facility Representative prior to starting work. Each contractor shall be familiar with the hazards of all chemicals in the workplace.

Handling and Storage

1. Hazardous Materials shall be transported, stored, used, handled and labeled in accordance with federal, state, local and site regulations.
2. Good industrial hygiene and safety practices must be followed when handling chemicals. These practices include avoiding unnecessary exposure, wearing specified protective

equipment/clothing, washing hands before eating, removing any protective clothing before eating or before entering break areas and following recommended safe handling procedures.

3. Flammable liquids in quantities of less than 55 gallons (208 liters) shall be stored in approved "safety" cans. Other hazardous materials shall be kept in approved containers.
4. Flammable liquids in quantities of 55 gallons (208 liters) or more shall be stored either in their original, unopened shipping containers or in drums or tanks that are labeled, grounded, and equipped with self-venting bungs and self-closing valves. Such containers shall be placed inside a diked area located at least 20 feet from smoking, welding, burning and other sources of heat and at least 25 feet from any building.

Spill Control and Environmental Protection

1. We are committed to complying with all environmental laws and regulations. All contractors will be expected to conduct their work in the same manner.
2. Chemicals and other materials used by contractors may be classified as hazardous waste when intended for disposal. At no time, shall waste chemicals be discarded in the ordinary trash dumpsters, spilled onto the ground or poured into any drains or sewers.
3. All spills or releases to the ground, water or air of any kind must be reported to the Facility Representative immediately. Contractors shall be responsible for the safe and complete clean up of any spilled material.

Asbestos

1. Asbestos containing material shall not be used for any new installations or repair work. All applicable federal, state, local and site regulations for removal, handling and disposal of asbestos-containing materials shall be followed.
2. Asbestos-containing materials can include, but are not limited to, the following:
 - Insulating materials
 - Floor tiles
 - Roofing materials
 - Fireproofing materials
 - Transite
 - Lab stone
 - Gasket materials

Lead

1. Lead exposure in construction activities is regulated.
2. Before cutting, burning, blast cleaning or otherwise disturbing a paint film, a test for the presence of lead shall be conducted.
3. Materials containing lead can include, but are not limited to, the following:
 - Paint
 - Film
 - Solder

Holes in Floors and Decks

All holes or openings through floors or decking shall be provided with a cover or barricade. When a cover is used, it shall be: 3/4" plywood for openings 18" and less, and 2" lumber or doubled 3/4" plywood for all other openings.

Housekeeping

1. Equipment, areas, or ductwork to be removed or renovated may need to be decontaminated. The Facility Representative will provide assistance.
2. Many rooms on site are controlled as clean rooms to prevent product contamination. If cleanliness must be maintained, special arrangements need to be made in advance before performing activities.
3. Corridors, doors, emergency equipment, fire protection valves and equipment, electrical switches, panel-boards and other such equipment shall be kept clear and / or accessible at all times.
4. Combustible construction scrap (such as wood, paper and carpet) shall be removed from the building daily,

5. The contractor may be responsible for supplying their own dumpster for collection and removal construction waste.
6. Containers for hazardous waste shall be labeled and used consistent with site, local and federal regulations. Contact your Facility Representative for details
7. Temporary or permanent overhead storage of debris, tools, equipment, materials etc., is prohibited. No loose material shall ever be left in the overhead area or above a suspended ceiling.

Internal Combustion Engines

When using or operating an internal combustion engine inside a building, a safety review shall be conducted involving the Facility Representative, the facility Safety and Health Office and the contractor. Consideration will be given to proper ventilation for the removal of exhaust gases from the building.

Some sites prohibit the use of internal combustion engines inside a building.

1. Engines shall not be refueled inside a building. This includes liquid propane gas (LPG) engines. LPG bottles shall be changed outside.
2. Engines shall not be stored inside a building.

Ladders

1. Contractors must furnish their own ladders for use.
2. The user shall inspect every ladder before using it; defective ladders will be removed from service.
3. Painted ladders are not permitted.
4. If it is necessary to place a ladder in or behind a doorway, barricade the work area and post warning signs.
5. While ascending and descending a ladder, hold on with both hands. Use a handline to raise and lowers tools and materials.
6. Keep both feet on the ladder rungs. Do not reach out too far. Change the position of the ladder as often as necessary to keep within the reach of the work.
7. Face the ladder when working from it. Use fall protection if you must stand backwards on a ladder, your feet are greater than 6 feet off the floor or any time conditions are questionable.
8. Do not allow more than one person on a ladder unless the ladder is designed for more than one person.
9. Do not use metal ladders for electric welding or near energized electrical services or lines.
10. The use of type 1a ladders (300 lb. rating) is recommended.
11. Ladders shall be secured when stored so as not to become an obstruction or allowed to fall.

Straight or Extension Ladders

1. Place ladder using the 4 - 1 rule. *Illustration*
2. Every ladder shall be equipped with a tie-off rope and non-skid safety feet.
3. Every ladder shall be tied off or otherwise held during use.
4. The top of the ladder shall extend at least three (3) feet beyond the object supporting it.

Illustration

5. After setting the ladder, insure that the safety dogs or latches are engaged. Secure the excess extension rope.
6. Do not work from the top three- (3) rungs of the ladder.

Stepladders

1. Set the stepladder level on all four feet, with the spreaders locked in place. Stepladders should not be used as a straight ladder.
2. Do not stand or sit on the top or top step on a stepladder unless the ladder is designed to do so.
3. Do not stand on the step below the top step on any stepladder over three (3) feet high.
4. Clear all tools and equipment from the ladder before moving it.
5. When using a stepladder close to the edge of an elevated platform, roof or floor opening the ladders shall be tied off and fall protection utilized.
6. Stepladders 8 feet tall and taller should be tied off or otherwise held during use.

Lock Out

Energized or power-driven equipment shall be secured prior to adjusting, repairing or replacing in such a way that people are protected from injury and equipment is not damaged. The lockout/tagout procedure ensures that equipment cannot be started when it may endanger personnel and all stored energy is secured before maintenance and repair. All facility and contractor personnel shall comply with this procedure without exception.

1. No individual shall work on any piece of equipment until the equipment has been locked and/or tagged out.
2. Only the employee who applied the lockout / tagout should remove it. If the employee is not available, special procedures (which include the two-person rule) will be followed to remove the lockout.
3. The Facility Representative is responsible for ensuring that equipment has been shut down and secured.
4. The site lockout standard shall be followed.
5. The contractor shall provide a sufficient number of lockout / tagout devices

Material Handling

Cranes / Hoists

1. Proof of inspection and/or written certification that material-handling equipment is safe and appropriate for the intended work shall be required.
2. Properly trained personnel shall operate this equipment. Proof of training shall be available on request.
3. Riding on material hoists, crane loads or “headache” balls is prohibited.
4. A crane shall never be raised or swung over people or an occupied building.
5. Tag lines shall be used to control all loads.
6. The Facility Representative shall be notified prior to the use of a crane. In some cases, a permit allowing the use of the crane may be required.
7. Workers must walk in front and behind the rig to check on clearances when moving a fixed boom crane.
8. Crane booms must be secured or lowered at the end of the workday.

Rigging

1. Riggers and equipment operators shall know the weight to be handled and the capacity and proper use of the handling equipment before use.
2. Use a shackle to hold two (2) or more eyes of a choker on a hook.
3. All hooks shall have either a safety latch or be “moused”, except when using a shake-out hook.
4. Do not rig from any structural member without prior approval of the Facility Representative.
5. Inspect all rigging equipment: hooks, shackles, chain-hoists, wire rope, beam clamps, etc. before each use.
6. Do not load chain-hoists, come-a-alongs, wenches, and cranes beyond their rated capacity.
7. Do not leave any suspended load unsecured and unattended.
8. Do not stand or place any part of the body below a suspended load.

Forktrucks

1. Passengers are not allowed to ride on forklifts.
2. Forktruck operators shall be trained and licensed on an annual basis.

Personnel Lifting Equipment

The use of personnel lifting equipment shall be approved by the Facility Representative prior to use. This applies but is not limited to crane-suspended work platforms, manual personnel lifts, power platform lifts, scissor lifts, high-reach lifts, bucket lifts and aerial lifts.

Motor Vehicles

1. Operators of vehicles and construction equipment on site roads shall observe all site traffic rules and speed limits.
2. Red flags or other warning equipment shall be used on any load that extends beyond the front, sides or rear of a vehicle.
3. Tail gates and doors shall not be left to swing freely. Rear doors on trucks shall not be left open while the truck is in motion.
4. Riding on running boards, fenders, bed side rails, tailgates or in the bed of a truck is not allowed.
5. All occupants shall wear a seat belt.
6. Engines must be stopped while being fueled.
7. Windshield and rear glass must be free of obstructions.
8. No passenger is permitted to leave or board a moving vehicle.
9. All drivers must have a valid driver's license.
10. Vehicles shall not be left unattended with engines running.
11. Vehicles and trailers being loaded or unloaded must have the wheels chocked, brakes set and engine off (*unless engine is necessary for unloading*).
12. All vehicles towing trailers must use safety chains.

Roof Work

Obtain clearance from the Facility Representative before accessing any roof.

1. Identify the materials being exhausted from all roof stacks in the vicinity of the work to be performed.
2. A roof edge is considered to be protected when a 42 inch handrail with midrail and toe board or parapet are present.
3. No one is permitted within 6 feet of an unprotected roof edge without fall arrest equipment or a safety warning system.
4. Special care must be taken when high winds present a hazard to prevent being blown off the roof.

Scaffolding

1. Before beginning work on a scaffold, it should be visually inspected to ascertain that; handrails, midrails, toeboards and decking are in place and that all locking pins are in place at each joint.
2. Approved handrails, midrails, toeboards and decking consists of:
 - Handrails - 42 inches off the deck, rigidly secured to withstand 200 lb. of lateral force;
 - Midrails - 21 inches off the deck and rigidly secured;
 - Toeboards - minimum 4 inches high and rigidly mounted on top of the decking; and
 - Decking - 2 inch scaffold grade lumber, laminated wood or manufactured aluminum decking. Decking shall overhang end supports a minimum of 6 inches and maximum of 12 inches.
3. Personnel shall wear fall-arrest equipment, properly tied off while constructing scaffolding and on any elevated platform not equipped with standard handrails, midrails, toeboards and decking.
4. Adjusting screws shall not be extended more than 12 inches of thread.
5. Personnel shall not climb on, or work from; any scaffold handrail, midrail or brace member.
6. All scaffolds shall be erected level and plumb, on a firm base.
7. A scaffold shall be tied off or stabilized with outriggers when its height is more than three (3) times the smaller dimension of its base. Scaffolds shall also be secured horizontally every 30 feet.
8. The safe working loads on all scaffolds shall not be exceeded. Bricks, tiles, blocks and other staged material shall not be stacked higher than 24 inches off the decking.
9. No one shall alter any scaffold member by welding, burning, cutting, drilling or bending any part.
10. Scaffolds shall be cleared of all snow, ice and unnecessary tools and debris prior to starting work.
11. Scaffolds under which personnel are allowed walk and work shall be provided with a 1/2-inch mesh, No. 18 gauge wire screen or equivalent between the toeboard and handrail.
12. No rigging shall be done from the scaffold handrails, midrails or toeboards.
13. Rolling scaffolds shall be used only on stable, level smooth surfaces. Personnel shall watch for overhead clearance when moving a scaffold. Casters shall be pinned and locked when the scaffold is in use.
14. Swinging stages, toothpicks, boatswain chairs, floats and other types of elevated work platforms shall be approved by the Facility Representative and inspected by a qualified person before use.

Fall Protection will be secured before wearers step onto these scaffolds and shall not be removed until wearers are clear of the scaffold. Fall protection shall be tied off to independent lifelines or the building structure. One lifeline per person.

Tools

Contractors will provide their own tools unless the Facility Representative gives prior authorization.

Hand

1. Use the correct tool for the job for which it was designed to do
2. Keep hand tools in good operating condition.
3. Keep tools that are subject to impact (chisel, star drills etc.) which tend to “mushroom” dressed to avoid injury.
4. Do not force tools beyond their capacity. Do not use “cheater bars”; try the next size wrench, heat, penetrating oil, etc.
5. Use tool holders when driving stakes and wedges and when holding star drills, bullpoints and similar tools.
6. Do not carry unprotected - pointed tools in pockets.

Power

Loose clothing, long hair that is not secured, gloves, rings and other jewelry shall not be worn around rotating equipment.

1. Material should be secured when power tools are used.
2. Every power tool should be examined before use for, damaged parts, loose fittings and frayed or cut electrical cords. Defective tools shall be taken out-of-service.
3. Portable electrical equipment and tools shall be grounded or “double insulated.”
4. Ground Fault circuit interrupters shall be used on all extension cords and portable electrical tools.
5. All tools shall be used with the correct shield, guard or attachment in place.
6. All fuel-powered tools used inside the buildings or enclosures require special consideration regarding ventilation, noise, refueling etc. Approval shall be obtained from the Facility Representative.

Welding, Open Flame and Sparking Equipment

Though it may have a different name at different sites e.g. “Burning Permit”, “Hot Work Permit”, a site permit is necessary for welding, cutting, burning, hot tapping or the use of equipment that produces hot sparks or involves an open flame anywhere in the facility.

1. The Facility Representative shall be informed of all Welding, Open Flame and Sparking Equipment use prior to start up.
2. Remove any flammable materials from the work area.
3. All exposed combustible materials around and below the work area shall be removed, covered with a fire-retardant material or otherwise protected from all sparks and slag.
4. A second person will act as a firewatch during all Welding, Open Flame and Sparking Equipment use.
5. One 2-A:40-B-C (as a minimum), UL rated and fully charged shall be within 30 feet of the work.
6. Ventilation shall be adequate for the material being welded or burned. Personnel should avoid breathing fumes. An exhaust system, blower or respirator should be used as required.
7. No welding or burning shall be done on a closed vessel or tank until it has been decontaminated and purged.
8. When possible all cylinders should be staged outside of the work area and protected from sparks or slag from the burning operation. All compressed gas cylinders shall be secured in an upright position to an adequate support.
9. Hoses and welding leads shall not pass through doorways. If there is no alternative, the door shall be braced open and the hoses and leads protected from damage.
10. All fittings, couplings and connections shall be tight “leak-free.”
11. Flashback arrestors shall be an integral part of the oxygen / fuel regulators and torch inlet valves.

12. Burning, welding or any open flame work should not take place in areas that are not sprinkler protected. Consider moving the work to a maintenance shop or other area.
13. Wear the appropriate PPE for the type of work being performed. For eye protection, the minimum guidelines are;
 - Electric welding - approved welding hood with no less than a No. 10 filter with a safety lens on both sides.
 - Gas burning and welding - approved burning goggles with at least a No. 3 filter with safety lens on both sides.
14. Welding curtains and shields shall be used to protect others. Warning signs should be posted as a warning.
15. The Welding, Open Flame and Sparking Permit are invalid during emergency situations. All such work will stop when the emergency alarm sounds.
16. A fire check of the area shall be made 1/2 hour, 1 hour, and 2 hours following the completion of the work.

J) Permits

Before starting work, written permits if appropriate, authorized by the proper persons are required. All permits, where applicable, may be obtained from your Facility Representative. The permits shall be posted at or near the worksite. Commonly needed permits are as follows;

Work Permit	For work of any type
Welding, Open Flame and Sparking Equipment	For flame or spark - producing work
Excavation Permit	For any excavation (<i>including drilling and fence posts</i>) in earth, roads, parking lots and slab floors on grade.
Confined Space Entry	For entry into any “ <i>permit required</i> ” confined space such as vessels, tanks, pits and manholes.
Crane Permit	Whenever a crane is used on site.
Radiation Permit	To be completed prior to bring radioactive sources on site.
Roof Access Permit	Used at some sites to allow access to the roof area.
Respirable Fiber (Asbestos) Permit	To remove or work with materials containing asbestos or ceramic fibers.
Line Break	To be used whenever first cutting into a process or service line.
Building Services Shutoff Permit	For temporary shutoff, shutdown or reduction of building services including HVAC, nitrogen, water, compressed air, electric, steam, etc.
Fire Protection Permit	To work on, modify or repair any fire protection system. i.e. water, dry chemical, Halon, CO2.
Electrical Proximity Work	To work near exposed - unguarded electrical conductors greater than 50 volts.

K) Table of OSHA Standards

Table of General Industry Standards Applicable to Construction

Abrasive Blasting	1910:244(b) & 94(a)(3)
Abrasive Grinding	1910:243(b) & (3), 243(c), (a)(i), 212(b), 215(a)(4)
Accident Recordkeeping Requirements	1904.2(a) & (b)(2), 1904.4, 1904.5, 1904.6(a) & (d)(1), 1907.7(a) & (b)

Aerial Lifts	1926.453
Aisles and Passageways	1910.22(b)(a), 22(b)(1), 22(c)
Asbestos	1910.1001(f)(vi), 1001(q)(ii)
Belt Sanding Machines	1910.213(p)(4)
Boilers	ASME Boiler & Pressure Vessel Code
Chains, Cables, Ropes, Hooks	1910.179(i)(iii), .179(i)(2)(iu) & (m)(1), .180(h)(2), .179(h)(2)(v)
Chipguards	1910.242(b)
Compressed Air	1910.242(b)
Compressed Gasses	1910.101(b)
Control of Hazardous Energy	1910.147
Cranes and Hoists	1910.179(I)(2) & 184(d), .179(I)(3), .179(e)(1)-(4), .179(b)(5)
Cylinders, Compressed Gas, used in	1910.252(a)(2)(ii)(a) & (b), Welding.252(a)(2)(iii)(b) & (a)(2)(v)(c)(i), .252(a)(2)(ii)(d) & (a)(2)(iv)(c)
Dip Tanks Containing Flammable Liquid	1910.108(c)(2)
Dockboards	1910.30(a)(1), .30(a)(2) & (4), .30(a)(5)
Drinking Water	1910.120(2)(i)
Elevators, Dumbwaiters, Escalators, Moving Walks	1910.306(c)(1)
Electrical Safety-Related Work Practices	1910.323, .333(b), .333(c)(f), .333(a)
Electrical Utilization Equipment	1910.303(e) & (f), .303(g)(2)(i) & (iii), .304(f)(3)(i) & (ii), .304(f)(5)(iv) & (v), .305(g)(1)(iii), .305(g)(2)(ii) & (iii)
Emergency Action Plans	1910.38(a)
Emergency Flushing Eyes & Body Exits	1910.151(c) 1910.36(b)(1), .36(b)(3) & (8), .36(d)(1), .37(f)(1), .37(k)(2), .37(h)(1), .37(f)(2), .37(g)(12), (4), & (8) .37(q)(2)
Excavations	1926.650
Explosives and Blasting Agents	1910.109(c)(5)(i) & (vii)
Eye and Face Protection	1910.133(a)(1) & (a)(6)
Fan Blades	1910.212(a)(5)
Fire Doors	See NFPA Codes
Fire Protection	1910.157(c)(1) & (4), .157(c)(1), .157(e)(3), .157(g)(1), .157(d)(3)
Flammable Liquids Incidental to	1910.106(E)(2)(v)(a), .236(b), .106(d)(4)(i) Principal Business & (iii) & (iv), .106(e)(3)(v), .106(e)(6)(ii)
Floors, General conditions	1910.22(a)(2) & (3), .22(d)(1)
Floor Loading Limits	1910.22(d)(1)
Floor Openings and Open Sides	1910.23(a)(1) & (2), .23(a)(3), .23(a)(8), .23(c)(1) & (2), .23(a)(3)
Foot Protection	1910.132(a), .136
Forklift Trucks	1910.178(p)(1), .178(e)(1), .178(e)(2), .178(m)(7), .178(1)
General Duty Clause	PL91-596
Guards, Construction of Hazard Hazardous Waste Operations	1910.219(o)(1) & (2) Hazard Communication 1200(h)(2) 1910.120(a)(3), .120(e), .120(b)(1), .120(f), (<i>Emergency Response</i>).120(b)(1), .120(f), .120(g)(3), .120(k)(5)
Hand Tools	1910.242(a), .135, .304(f)(5)(v), .242(a)
Head Protection	1910.132(a)(1), .135, APSI 2.90.2
Housekeeping	1910.22(a)(1) & .141(a)(3)
Ladders, Fixed	1910.27(b)(1)(i) - (iii), .27(d)(1), (2) & (5), .27(d)(1)(iii) & (iv), .27(d)(3)
Ladders, Portable	1910.25(c)(2)(i)(f) & 26(a)(3)(viii), .25(d)(1)(x) & .26(c)(2)(vii), .25(d)(2)(i) & (iii), .26(c)(3)(i) & (iii), .25(d)(2)(xv), .26(c)(3)(viii)
Lighting (General)	Many standards

Lunchrooms	1910.141(g)(2) & (3)
Mechanical Power Presses	1910.217(c)(1) & (2)(2)(i)(a), .217(c)(3)(i)a-g, .217(b)(3)(iii)(b), .217(b)(3)(i), .217(e)(b)(8)(i), .217(e)(f)(i), .217(g)(1)
Machine Guarding	1910.212(a)(1) & (2), .212(a)(3)(ii), (iii), (iv)
Machinery, Fixed	1910.212(b)
Mats, Insulating	1910.305(i)(4)(iv)(b)
Medical Services and First Aid	1910.151(a) & (b)
Noise Exposure	1910.94(a)(1) & (b)(1)
Personal Protective Equipment	1910.132(a) & (b)
Portable Abrasive Wheels	1910.243(c)(1)(i) & (ii), .243(c)(3)
Portable Power Tools, Pneumatic	1910.243(b)(1)
Power Transmission Equipment	1910.219(b)(1), (c)(2)(i), & (f)(3), Guarding .219(e)(3), .219(b)(1)(iii), .219(e)(1)(i), .219(f)(1), .219(i)(2), .219(c)(5)
Pressure Vessels, Portable Unfired	1910.169(a)(2) & .106(b)(1)(v)(b), .96(b)(1) & (c)(1), .97(a)(2)
Radiation	1910.96(e)(2) & .97(a)(3), .96(b)(2)(iii) & .96(n)(1)
Railings	1910.23(e)(1), .23(c)(1), .23(e)(3)(iv), .23(e)(2)
Respiratory Protection	1920.123(a)(2) & (b)(2), .134(a)(2) & (b), .134(b)(1), (b)(9) & (e)(3), .134(b)(3), .134(b)(5), (b)(6) & (b)(7), .134(b)(8), .132(b)(10)
Revolving Drums	1910.212(a)(4)
Saws, Band	1910.213(i)(1)
Saws, Portable Circular	1910.243(a)(1)
Saws, Radial	1910.213(h)(1)-(4)
Saws, Swing or Sliding cut-off	1910.213(g)(1)-(4)
Saws, Table	1910.213(c)(1)-(3), .213(d)(1)-(2), .213(e)(1)-(2), .213(f)(1)-(3)
Scaffolds	1910.28(a)(4), (a)(9), (a)(11), (a)(13), 28(a)(3), (a)(17)
Spray Finishing Operations	1910.107(b)(5)(i), (b)(9), (b)(5)(iv), .107(c)(2), .107(c)(6), .107(e)(2), (e)(9), .107(g)(2), (g)(3), (g)(7)
Stairs, Fixed Industrial	1910.23(d)(1) & 24(b), 24(e), 24(b)
Storage	1910.176(b), .176(c), .176(a)
Tanks, Open-Surface	1910.94(d)(3), .94(d)(9)(v), .94(d)(9)(viii), .94(d)(9)(i)
Toeboards	1910.23(c)(1), .23(e)(4)
Toilets	1910.141(c)(1)(i), .141(c)(2)(i), .141(c)(1)(ii)
Trash	1910.141(a)(4)(ii)
Washing Facilities	1910.141(d)(1) & (d)(2)(i), .141(s)(2)(iii) & (iv)
Welding - General	1910.252(b)(1) & (c)(i), .252(f)(2), .252(e)(2)(i), and (iii), .252(b)(4)(ix)(c)
Welding in Confined Spaces	1910.252(f)(4)(i)-(vi)
Woodworking Machinery	1910.213(c)-(r), .213(b)(1), .216(b)(3), .213(b)(4), .213(b)(b)

L) Other References

COMPANY Health and Safety Manual	Section II, Policy # D-5, Outside Contractor Controls
COMPANY Environmental Manual	Policy #2, Release Reporting; Emergency Response

M) Contractor Safety Information

Job Site or Project _____
COMPANY Representative _____
Phone # _____ Pager # _____

Special Safety Considerations _____

Emergency Phone Numbers

Security _____
Fire _____
Medical _____
Safety _____
Environmental _____
Other _____

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I have been issued a copy of the Contractor Safety Handbook. I understand the guidelines for Contractor Safety and agree to abide by the rules and guidelines in the handbook as well as any additional site rules and regulations that may be required for the job.

Print Name _____

Date _____

Craft _____

Company _____

Signature _____

Facility Representative _____