Safety Practices and Procedures (Unabridged)
Revised 6/30/2021

To all Employees and Contractors:

Productivity, quality, and efficiencies are directly related to a firm's ability to create and implement effective occupational safety, risk management, and environmental protection processes. USSI Global is committed to the provision of a safe and healthful work environment for all employees, contractors, and guests.

As an employee or contractor at USSI Global, your input and suggestions are as valuable as any incident investigation. The suggestions that you provide may lead to the development of proactive measures, which can prevent an injury or loss from occurring. Therefore, reporting safety, environmental, or loss control concerns to your immediate supervisor, or Program Manager is crucial to the success of the safety process. It is also important to note that the Occupational Safety & Health Act (OSHA) protects employees from any negative consequence as a result of reporting safety concerns or issues.
The policies and procedures are based on federal and state regulations, as well as site specific requirements. They have been created and implemented to protect our personnel, property, guests and community.

A contract with USSI Global to perform work on Customers' premises constitutes a requirement that:

The Service Providers abide by and enforce USSI Global Safety Practices and Procedures in addition to safety policies and practices as they apply to work on USSI Global's Customers' premises. The Service Provider provides all their Sub-Contractors and/or personnel with a copy of these practices and procedures and insures compliance.

Service Provider is responsible for immediately reporting, in written form, to the USSI Global Project Manager and site contact any accident involving personnel or equipment. Service Provider is responsible for maintaining an accurate OSHA log.

Without, in any way, relieving the Service Provider of full responsibility to comply with all appropriate safety requirements, whether or not specified herein, USSI Global will designate a representative for each contract project (Project Manager) with responsibility, among others, for monitoring Service Provider's adherence to the safety practices and procedures for that project. The Project Manager will keep USSI Global's Field Services Coordinator advised of safety compliance by the Service Provider and will recommend termination of any contract for violations of the USSI Global Safety Practices and Procedures for Service Providers.

GENERAL:

All Service Providers' equipment and work methods must comply with applicable OSHA Standards, including 29 CFR 1910(Occupational Safety and Health Standards for General Industry) and 29 CFR 1926 (Occupational Safety and Health Standards for the Construction Industry), depending on the type work being performed. The Service Provider will identify any special hazards from Customer sites.

The conduct of all Service Provider employees should be in keeping with safe work practices including no running or engaging in horseplay. Service Provider is to designate a competent person to conduct frequent and regular safety inspections of job sites and conditions. Service Provider is to train its employees in the recognition and avoidance of unsafe conditions.

Service Providers as required by customer contract will complete customer site specific safety orientation. They will also be required to have knowledge of site evacuation plans and assembly points, location of nearest hospital/clinic, and contact information for the site.

Service Providers are required to complete daily safety inspections prior to performing work any on site to determine if there are any new safety hazards. The main Service Provider on site is required to meet with each field technician/engineer assigned by USSI Global to go over tool box requirements and safety concerns.

INSURANCE:

Proof of Workers Compensation and General Liability Insurance must be provided by the Service Provider as specified in the contract. A Certificate of General Liability Insurance is required for verification.

FIRE PREVENTION AND FIRE SAFETY SYSTEMS:

In order to prevent fire, be aware of the following potential fire hazards:
Accumulated waste paper.
Short circuits in energized equipment or building electrical systems.
Overheating and burning food.
Electrical problems with microwaves.
Personal space heaters.
Appliances.
Heating, ventilation and air conditioning (HVAC) equipment.
Flammable liquids, gases, or fuels.
Multiple power strips plugged into one socket.
Running cords underneath carpeting, through walls and ceilings.

In case of fire:
Sound the fire alarm and call 9-1-1 and ask for the Fire Department.
Give your location and describe the situation.
DO NOT HANG UP until the dispatcher does first!
Alert others in your area.
Stay calm.
Only attempt to extinguish a fire if you have been trained and it is safe to do so.

Fire Extinguisher Use:
The following steps should be followed when responding to a fire:
Identify a safe evacuation path before approaching the fire. Do not allow the fire, heat, or smoke to come between you and your evacuation path.
Select the appropriate type of fire extinguisher.
Discharge the extinguisher within its effective range using the P.A.S.S. technique (pull, aim, squeeze, and sweep).
Back away from an extinguished fire in case it flames up again.
Evacuate immediately if the extinguisher is empty and the fire is not extinguished.
Evacuate immediately if the fire progresses beyond the beginning stages.

Most fire extinguishers operate using the following P.A.S.S. technique:
PULL... Pull the pin. This will also break the tamper seal.
AIM... Aim low, pointing the extinguisher nozzle (or its horn or hose) at the base of the fire.
SQUEEZE... Squeeze the handle to release the extinguishing agent.
SWEEP... Sweep from side to side at the base of the fire until it appears to be out. Watch the area. If the fire re-ignites, repeat steps 2 - 4.
Note: Do not touch the plastic discharge horn on CO2 extinguishers, it gets very cold and may damage skin.

If you have the slightest doubt about your ability to fight a fire....EVACUATE IMMEDIATELY!

When a fire cannot be extinguished:
Alert others in your area to evacuate to a Safe Area.
Close (but DO NOT LOCK) all doors.
Evacuate using the nearest stairwell or exit.
Do Not Use Elevators
Stay low if smoke is present.
Check doors for heat before opening.

In the event of an evacuation, personnel must evacuate the building immediately upon notification or at the sound of an alarm and report to a safe area. Personnel should use the closest safe designated exit.

It is important to identify all individuals who will require assistance in an evacuation, prior to an emergency. Employees are expected to "self-identify" themselves if they require assistance.

CHEMICALS/HAZARDOUS MATERIAL:

The Service Provider shall be responsible for providing all chemicals and hazardous materials to be used by its employees to complete a project, and for providing the training to its employees for the proper and safe use of these substances. Service Providers shall provide a list and/or MSDSs for all chemicals brought on to USSI Global's Customers' premises. At the end of a project, the Service Provider shall be responsible for the removal and proper disposal of any unused chemicals or other hazardous products.

Hazard Communication Program

Introduction

In order to fulfill its obligation to protect the health and safety of employees, United Service Source, Inc. has developed the following hazard communication standard (HCS) program to comply with Occupational Safety and Health Administration (OSHA) standards 29 CFR 1910.1200 and 29 CFR 1926.59. United Service Source, Inc. will develop hazardous-chemical lists, obtain material safety data sheets (MSDSs) for each hazardous material used and provide training to our employees so they have a thorough understanding of what is required of the standard.

Copies of the written program, including the written chemical inventory list and MSDSs, will be made available upon request. Additionally, a copy of the written program will be kept at each job site for the duration of the project. The site copy will be maintained by the project manager and made available upon request. The master copy will be retained in the main office.

Scope

This program applies to all normal and emergency work operations, as required by local, state and federal regulations.

Chemical Inventory List

A chemical inventory list will be developed by the program administrator. The master list will be kept at the main office. A project-specific chemical inventory list will be developed for each project and maintained at the jobsite along with the appropriate MSDSs. When new chemicals arrive at a project site, a copy will be made of the MSDS, and the original will be sent to the home office. Any new chemicals will be added to the project's chemical inventory list as needed.

Hazard Determination

It will be the policy of United Service Source, Inc. not to evaluate hazardous chemicals purchased from suppliers or manufacturers. The suppliers and manufacturers will be relied upon to supply the information needed to satisfy standard requirements. The MSDS will be reviewed for completeness and additional information from the manufacturer will be requested if needed.

Material Safety Data Sheets

All MSDSs will be maintained by the project administrator. As new contracts are awarded, a project-specific HCS program will be developed for use in the field. The program will consist of the written program, a proposed chemical inventory list (generic in nature initially and modified as the project progresses) and all appropriate MSDSs. The project manager will be responsible for maintaining the program for the project's duration. When the job is complete, the project-specific HCS program will be returned to the program administrator for updating as needed.

If a chemical arrives without a MSDS, the program administrator office will be notified. The program administrator will begin the process of obtaining the MSDS. If the project is completed before the MSDS arrives, the home office will pursue the matter until the MSDS arrives. All letters sent to the manufacturer will be copied and sent to the project site for filing in the project-specific HCS program.

Container and Warning Labels

The program administrator will have the responsibility of acquiring hazard warning labels and making them available for each project. Labels will be consistent throughout the entire company. They will contain, at a minimum, the following information:

- identity of the chemicals
- all potential hazards associated with the chemical
- manufacturer's name, address and telephone numbers

Each project manager or other designated person will have the responsibility of assuring that all labels are affixed on containers properly. As new products arrive at the project, the project manager or other designated person will inspect the containers for labels. If the container is in need of a label, the project manager will affix one. No product will be used until it is properly labeled.

All portable containers will be dedicated to a single chemical and labeled with the appropriate information. The only exception to this rule is buckets of hot asphalt. Because of the elevated temperature of hot asphalt, labeling becomes impractical. The training program will specifically address this exception, informing all affected employees about wearing proper personal protective equipment (PPE) and other hazards associated with hot asphalt.

If a label falls off, it will be the responsibility of the project manager to replace it. If the label falls off in the home office area, it will be the responsibility of the program administrator to replace the label. In both circumstances, the container will be removed from service until a new label is affixed.

Nonroutine Tasks

On occasion, United Service Source, Inc. may be required to perform nonroutine tasks that may involve the use of hazardous substances. If such a need arises, a special training course will be conducted to inform employees of the potentially hazardous chemicals they may be exposed to during the nonroutine operation and measures they can take to avoid those exposures.

Informing Contractors

Any contractor with employees working in the United Service Source, Inc. workplace will be informed of the hazardous chemicals to which the contractor's employees may be exposed while performing their work. The contractor will take appropriate protective measures, as determined by the MSDS provided. United Service Source, Inc. management also will confer with the contractor's management as appropriate to discuss any hazards particular either to the work the contractor will be performing or the work area in which the work will be performed. Management or the program administrator will describe the labeling system used at United Service Source, Inc.

In addition, United Service Source, Inc. will require any contractor who intends to bring any hazardous chemicals to the workplace to provide an MSDS for each such chemical. The contractor will further be required to explain (orally or in writing) any precautionary measures necessary to protect employees during normal operation conditions or in foreseeable emergencies. The contractor also will explain his company's system for labeling hazardous chemicals. United Service Source, Inc. will train, or require the contractor to train, any United Service Source, Inc. employee who may be exposed to hazardous chemicals used by the contractor as provided in the employee training section.

Training

Employees who potentially could be exposed to hazardous chemicals will receive training in the elements of the hazard communication standard. During their initial training, they also will receive an overview of the chemicals typically used in the roofing industry. As new hazards are introduced, additional training will be conducted. Occasionally, we will use toolbox safety talks to discuss a specific chemical used at a project site. The typical training session will address the following:

- a summary of the company's written program and the OSHA HCS

- methods of detecting hazardous chemicals, including a description of the hazards' chemical and physical properties
- health hazards and signs or symptoms of exposure
- proper work practices for working with a hazardous substance
- PPE selection
- emergency procedures and first aid for spills and other exposures
- locations of MSDSs and the written program
- how to read a MSDS
- the type of labeling system the company uses and how to interpret the information contained on the label
- how to obtain additional information

The training program will be conducted initially and as new hazards are introduced. Periodic training will be conducted to further inform our employees of hazardous chemicals and the methods of safeguarding themselves. At least annually, refresher training will be conducted to reacquaint everyone with the standard and discuss any changes made to the program.

The training program elements will be reviewed at least annually.

Foremen and superintendents will receive additional training so that all field supervision will feel confident answering any questions the roofing crew may have. At a minimum, field supervision should be able to select the proper PPE for any given chemical and direct technical questions to the safety director.

At the conclusion of each training session, a question-and-answer period will be held so that employees can voice any further concerns on the topic. Each employee will sign an attendance form and write down his social security or employee identification number. The form will indicate where and when the training was conducted, what was covered, and who conducted the session. It will be dated and signed by the trainer. If a particular MSDS was discussed, a copy of it will be attached to the attendance form.

Chemical Inventory List

MSDS on file? Y/N	Product ID No.	Product Name	Manufacturer's name, address, city, state ZIP	Mfg's phone emergency phone numbers

EMERGENCY ACTION:

Service Provider employees are to comply with applicable Company Emergency Action Plans as covered by the Project Manager

or site contact. In every Service Provider orientation session, the Project Manager or site contact will inform the Service Provider of the emergency reporting and evacuation procedures to be followed by their employees for the buildings in which they are working. The Service Provider is required to report any emergency situations that arise in their work area to the USSI Global Project Manager, USSI Global Field Services Coordinator and USSI Global General Manager as well as the site contact.

Medical Emergency Response:

If someone becomes ill or is injured and requires immediate assistance:
Dial 9-1-1.
Provide detailed information on the location of the ill or injured person.
Such As:
Victim's age and gender.
Victim's location.
Nature of the medical emergency.
What help, if any, is being given

If victim is in a life threatening condition and you are trained in emergency first aid, provide immediate care (e.g., rescue breathing, CPR, pressure bandage, etc.).
If victim is not in a life threatening condition, provide basic first aid and reassurance as needed, and stay with the victim until the Fire Department/Paramedics arrive at the scene. Do not attempt to move a person who has fallen and appears to be in pain.

Attempt to obtain the following information from the ill or injured person:
Name, if not known.
Description of symptoms.
Allergies.
Medications.
Major medical history (heart condition, asthma, diabetes, etc.).

DO NOT HANG UP THE PHONE UNTILTHE DISPATCHER DOES!
Send someone to meet and direct paramedics. Remain at the scene after emergency personnel have arrived to provide information.

First Aid Programs

First aid training is primarily received through the American Heart Association, American Red Cross, National Safety Council (NSC), and private institutions. The American Heart Association, American Red Cross and NSC offer standard and advanced first aid courses via their local chapter/training centers. After completing the course and successfully passing the written and practical tests, trainees receive two certificates; (adult CPR and first aid). An emphasis on quick response to first aid situations is incorporated throughout the program. Other program elements include: basic first aid intervention, basic adult cardiopulmonary resuscitation (CPR), and universal precautions for self-protection. Specific program elements include training specific to the type of injury: shock, bleeding, poisoning, burns, temperature extremes, musculoskeletal injuries, bites and stings, medical emergencies, and confined spaces. Instruction in the principles and first aid intervention of injuries will cover the following sites: head and neck, eye, nose, mouth and teeth, chest, abdomen, and hand, finger, and foot injuries. Employers are responsible for the type, amount, and maintenance of first aid supplies needed for their particular program. The training program should be periodically reviewed with current first aid techniques and knowledge. Basic adult CPR retesting should occur every year and first aid skills and knowledge should be reviewed every three years. OSHA recommends that CPR training include having trainees develop 'hands-on' skills through the use of mannequins and partner practice. The references below provide further fundamentals to help develop and maintain first aid program and skills.

Blood borne Pathogens

As a result of an injury or other medical situation, you may be faced with exposure to blood or other bodily fluids.
If the infectious material - containing blood comes in contact with your skin, immediately wash with soap and water. Unless

trained, DO NOT attempt to clean up the spill yourself.

HAZARDS AND SAFETY CONCERNS:

In order to prevent possible injury, all unsafe conditions shall be corrected or made readily known to all personnel until corrected. Workers are protected by law. There will be no reprisal or disciplinary action for reporting unsafe conditions or actions.

Compressed Gases

Store cylinders in a ventilated area away from heat or ignition sources. Fasten cylinders securely at all times in an upright position. Cylinders in storage must be protected from weather extremes and direct sunlight. Protect the base of cylinders from dampness. Store flammable gases away from all other gases. Safety caps shall be in place at all times during storage and transport of cylinders. If stored outside, the gases must be kept under lock and key and kept away from populated areas and air intakes to buildings. Cylinders shall not be stored or left unattended in hallways, corridors, stairways, or other areas of access and/or egress. When classifying a gas mixture for storage, always base the classification on the most hazardous component. Always separate empty and full cylinder storage.

Confined Spaces

Many workplaces contain spaces that are considered confined because their configurations hinder the activities of any employees who must enter, work in and exit them. For example, employees who work in process vessels generally must squeeze in and out through narrow openings and perform their tasks while cramped or contorted. Occupational Health and Safety Administration (OSHA) uses the term confined space to describe such spaces. In addition, there are many instances where employees who work in confined spaces face increased risk of exposure to serious hazards. In some cases, confinement itself poses entrapment hazards. In other cases, confined space work keeps employees closer to hazards, such as asphyxiating atmospheres or the moving parts of machinery. OSHA uses the term permit-required confined space (permit space) to describe those spaces that both meet the definition of confined space and pose health or safety hazards.

What Are Confined Spaces?
Definition: A confined space has limited or restricted means of entry or exit, is large enough for an employee to enter and perform assigned work, and is not designed for continuous occupancy by the employee. Confined spaces are generally underground facilities and tank-like compartments. Confined spaces have limited means for entry and exit as well as poor natural ventilation, which could result in hazardous atmospheres. Examples of underground facilities include sewers, vaults, manholes, metering stations, valve pits and tunnels. Examples of tank-like compartments are chemical storage tanks, digesters, boilers, water storage tanks, silos, railroad tank cars and over-the-road tankers.

Permit-Required Confined Spaces: A permit-required confined space is one that meets the definition of a confined space and has one or more of these characteristics: (1) contains or has the potential to contain a hazardous atmosphere; (2) contains a material that has the potential for engulfing an entrant; (3) has an internal configuration that might cause an entrant to be trapped or asphyxiated by inwardly converging walls or by a floor that slopes downward and tapers to a smaller cross section; and/or (4) contains any other recognized serious safety or health hazards**.**

Non-Permit Confined Space: A non-permit confined space means a confined space that does not contain or have the potential to contain any atmospheric hazard capable of causing death or serious physical harm.

Confined Space Pre-Entry Checklist
This checklist must be filled out whenever workers enter a permit required space. A copy of the safe entry procedure must be available at the entry point to the confined space.

	OK	Action Needed
Did you survey the surrounding area to show it to be free of hazards such as drifting vapors from tanks, piping or sewers?		
Does your knowledge of industrial or other discharges indicate this area is likely to remain free of air contaminants while occupied?		

Are you certified in operation of the gas monitor to be used?		
Has a functional test been performed during this shift on the gas monitor to be used?		
Did you test the atmosphere of the confined space prior to entry? a) Was oxygen content between 19.5% and 23.5%? b) Was flammable vapor less than 10 percent of LEL/LFL? c) Were tests for toxic materials less than TLV/PEL?		
Have all sources of hazards been isolated from the confined space? (a) Have all pipes been blanked? (b) Have electrical and mechanical hazards been locked and blocked?		
Is all rescue equipment, as specified in the safe entry procedure, available outside the confined space?		
Will the atmosphere be continuously monitored while the space is occupied, if required by entry procedure?		
Have the facility emergency and rescue services been notified that a confined space entry is about to be made?		

NOTICE: If any of the above questions are answered Action Needed, do not enter the confined space until the conditions are corrected.
Supervisor/Lead Person _____ Date _____

Confined Space Entry Permit

A. SITE INFORMATION
Specific Location_____ Department_____
Crew Leader_____ Date/Time_____
Crew Members_____
Qualified Attendant_____
Description of Work_____
Special Precautions_____

B. PROTECTIVE EQUIPMENT
Gloves_____ Eye Protection_____ Face Shield_____
Ear protection_____ Other_____

C. EMERGENCY EQUIPMENT AVAILABLE
Fire Extinguisher____ Full Body Harness_____ Tri-Pod_____
Ropes & Lanyards_____ Communications_____ Portable Fans____
Other_____

D. PREENTRY SYSTEM CONTROL MEASURES
Mechanical Isolation___ Ventilation____ Electrical Lockout_____
Flushing/Purging_____ Other_____

E. PREENTRY TESTING
Oxygen____% Must be between 19.5 & 23.5%
Explosive Gases_____%LEL No more than 10% LEL
H2S_____ppm No more than 10ppm
CO _____ppm No more than 35ppm

	CONFINED SPACES (From OSHA Inspection Checklists)
	Are confined spaces thoroughly emptied of any corrosive or hazardous substances, such as acids or caustics, before entry?
	Have all lines to a confined space containing inert, toxic, flammable or corrosive materials been valved off and blanked or disconnected and separated before entry?

	Have all impellers, agitators or other moving parts and equipment inside confined spaces been locked-out if they present a hazard?
	Is either natural or mechanical ventilation provided prior to entering a confined space?
	Are appropriate atmospheric tests performed to check for oxygen deficiency, toxic substances and explosive concentrations in the confined space before entry?
	Is adequate lighting provided for the work to be performed in the confined space?
	Is the atmosphere inside the confined space frequently tested or continuously monitored during conduct of work? Is there an assigned safety standby employee outside of the confined space, when required, whose sole responsibility is to watch the work in progress, sound an alarm if necessary and render assistance?
	Is the standby employee appropriately trained and equipped to handle an emergency?
	Is the standby employee or other employees prohibited from entering the confined space without lifelines and respiratory equipment if there is any question as to the cause of an emergency?
	Is approved respiratory equipment required/available if the atmosphere inside the confined space cannot be made acceptable?
	Is all portable electrical equipment used inside confined spaces either grounded and insulated or equipped with ground fault protection?
	Before gas welding or burning are started in a confined space, are hoses checked for leaks, compressed gas bottles forbidden inside of the confined space, torches lighted only outside of the confined area and the confined area tested for an explosive atmosphere each time before a lighted torch is to be taken into the confined space?
	If employees will be using oxygen-consuming equipment such as salamanders, torches, and furnaces in a confined space, is sufficient air provided to ensure combustion without reducing the oxygen concentration of the atmosphere below 19.5% by volume?
	Whenever combustion-type equipment is used in a confined space, are provisions made to ensure the exhaust gases are vented outside of the enclosure?
	Is each confined space checked for decaying vegetation or animal matter that may produce methane?
	Is the confined space checked for possible industrial waste that could contain toxic properties?
	If the confined space is below the ground and near areas where motor vehicles will be operating, is it possible for vehicle exhaust or carbon monoxide to enter the space?

Definitions:

"Acceptable entry conditions" means the conditions that must exist in a permit space to allow entry and to ensure that employees involved with a permit-required confined space entry can safely enter into and work within the space.

"Attendant" means an individual stationed outside one or more permit spaces who monitors the authorized entrants and who performs all attendant's duties assigned in the employer's permit space program.

"Authorized entrant" means an employee who is authorized by the employer to enter a permit space.

"Blanking or blinding" means the absolute closure of a pipe, line, or duct by the fastening of a solid plate (such as a spectacle blind or a skillet blind) that completely covers the bore and that is capable of withstanding the maximum pressure of the pipe, line, or duct with no leakage beyond the plate.

"Confined space" means a space that:

(1) Is large enough and so configured that an employee can bodily enter and perform assigned work; and

(2) Has limited or restricted means for entry or exit (for example, tanks, vessels, silos, storage bins, hoppers, vaults, and pits are spaces that may have limited means of entry.); and

(3) Is not designed for continuous employee occupancy.

"Double block and bleed" means the closure of a line, duct, or pipe by closing and locking or tagging two in-line valves and by opening and locking or tagging a drain or vent valve in the line between the two closed valves.

"Emergency" means any occurrence (including any failure of hazard control or monitoring equipment) or event internal or external to the permit space that could endanger entrants.

"Engulfment" means the surrounding and effective capture of a person by a liquid or finely divided (flowable) solid substance that can be aspirated to cause death by filling or plugging the respiratory system or that can exert enough force on the body to cause death by strangulation, constriction, or crushing.

"Entry" means the action by which a person passes through an opening into a permit-required confined space. Entry includes ensuing work activities in that space and is considered to have occurred as soon as any part of the entrant's body breaks the plane of an opening into the space.

"Entry permit (permit)" means the written or printed document that is provided by the employer to allow and control entry into a permit space and that contains the information specified in paragraph (f) of this section.

"Entry supervisor" means the person (such as the employer, foreman, or crew chief) responsible for determining if acceptable entry conditions are present at a permit space where entry is planned, for authorizing entry and overseeing entry operations, and for terminating entry as required by this section.

NOTE: An entry supervisor also may serve as an attendant or as an authorized entrant, as long as that person is trained and equipped as required by this section for each role he or she fills. Also, the duties of entry supervisor may be passed from one individual to another during the course of an entry operation.

"Hazardous atmosphere" means an atmosphere that may expose employees to the risk of death, incapacitation, impairment of ability to self-rescue (that is, escape unaided from a permit space), injury, or acute illness from one or more of the following causes:

(1) Flammable gas, vapor, or mist in excess of 10 percent of its lower flammable limit (LFL);

(2) Airborne combustible dust at a concentration that meets or exceeds its LFL;

NOTE: This concentration may be approximated as a condition in which the dust obscures vision at a distance of 5 feet (1.52 m) or less.

(3) Atmospheric oxygen concentration below 19.5 percent or above 23.5 percent;

(4) Atmospheric concentration of any substance for which a dose or a permissible exposure limit is published in Subpart G, Occupational Health and Environmental Control, or in Subpart Z, Toxic and Hazardous Substances, of this Part and which could result in employee exposure in excess of its dose or permissible exposure limit;

NOTE: An atmospheric concentration of any substance that is not capable of causing death, incapacitation, impairment of ability to self-rescue, injury, or acute illness due to its health effects is not covered by this provision.

(5) Any other atmospheric condition that is immediately dangerous to life or health.

NOTE: For air contaminants for which OSHA has not determined a dose or permissible exposure limit, other sources of information, such as Material Safety Data Sheets that comply with the Hazard Communication Standard, section 1910.1200 of this Part, published information, and internal documents can provide guidance in establishing acceptable atmospheric conditions.

"Hot work permit" means the employer's written authorization to perform operations (for example, riveting, welding, cutting, burning, and heating) capable of providing a source of ignition.

"Immediately dangerous to life or health (IDLH)" means any condition that poses an immediate or delayed threat to life or that would cause irreversible adverse health effects or that would interfere with an individual's ability to escape unaided from a permit space.

NOTE: Some materials -- hydrogen fluoride gas and cadmium vapor, for example -- may produce immediate transient effects that, even if severe, may pass without medical attention, but are followed by sudden, possibly fatal collapse 12-72 hours after exposure. The victim "feels normal" from recovery from transient effects until collapse. Such materials in hazardous quantities are considered to be "immediately" dangerous to life or health.

"Inerting" means the displacement of the atmosphere in a permit space by a noncombustible gas (such as nitrogen) to such an extent that the resulting atmosphere is noncombustible.

NOTE: This procedure produces an IDLH oxygen-deficient atmosphere.

"Isolation" means the process by which a permit space is removed from service and completely protected against the release of energy and material into the space by such means as: blanking or blinding; misaligning or removing sections of lines, pipes, or ducts; a double block and bleed system; lockout or tagout of all sources of energy; or blocking or disconnecting all mechanical linkages.

"Line breaking" means the intentional opening of a pipe, line, or duct that is or has been carrying flammable, corrosive, or toxic material, an inert gas, or any fluid at a volume, pressure, or temperature capable of causing injury.

"Non-permit confined space" means a confined space that does not contain or, with respect to atmospheric hazards, have the potential to contain any hazard capable of causing death or serious physical harm.

"Oxygen deficient atmosphere" means an atmosphere containing less than 19.5 percent oxygen by volume.

"Oxygen enriched atmosphere" means an atmosphere containing more than 23.5 percent oxygen by volume.

"Permit-required confined space (permit space)" means a confined space that has one or more of the following characteristics:

(1) Contains or has a potential to contain a hazardous atmosphere;

(2) Contains a material that has the potential for engulfing an entrant;

(3) Has an internal configuration such that an entrant could be trapped or asphyxiated by inwardly converging walls or by a floor which slopes downward and tapers to a smaller cross-section; or

(4) Contains any other recognized serious safety or health hazard.

"Permit-required confined space program (permit space program)" means the employer's overall program for controlling, and, where appropriate, for protecting employees from, permit space hazards and for regulating employee entry into permit spaces.

"Permit system" means the employer's written procedure for preparing and issuing permits for entry and for returning the permit space to service following termination of entry.

"Prohibited condition" means any condition in a permit space that is not allowed by the permit during the period when entry is authorized.

"Rescue service" means the personnel designated to rescue employees from permit spaces.

"Retrieval system" means the equipment (including a retrieval line, chest or full-body harness, wristlets, if appropriate, and a lifting device or anchor) used for non-entry rescue of persons from permit spaces.

"Testing" means the process by which the hazards that may confront entrants of a permit space are identified and evaluated. Testing includes specifying the tests that are to be performed in the permit space.

NOTE: Testing enables employers both to devise and implement adequate control measures for the protection of authorized entrants and to determine if acceptable entry conditions are present immediately prior to, and during, entry.

HOT WORK PERMIT

A hot work permit is required in advance of any work requiring heat or open flame. Hot work procedures include welding, torch cutting, grinding, brazing, flame soldering, thawing pipes with torches, and any work with is a potential for fire. These permits must be secured from USSI Global's Customer. Appropriate fire protection including a fire watch and fire extinguishers must be present during all hot work. To the extent feasible, welding screens will be used. Welding in confined spaces generally will not be done. If such welding is absolutely necessary, it will be done only under conditions covered by the Permit Required Confined Space Entry Standard (OSHA). On each construction project, the Service Provider will identify to the Project Manager the person to whom the responsibility of "Fire Marshall" has been delegated.

LOCKOUT AND TAGOUT PROCEDURES

Failure to lock out and block out machinery before working on it is a major cause of serious injury and death. These injuries can be prevented by establishing and using an effective lockout program.

Lockout/blockout means that any energy source — whether electrical, hydraulic, mechanical, compressed air, or any other source that might cause unexpected movement—must be disengaged or blocked, and electrical sources must be de-energized and LOCKED or positively sealed in the OFF position.

But even a locked-out machine may not be safe if there are parts of the machine that are not BLOCKED to prevent inadvertent movement. Potential energy that may need to be blocked can come from suspended parts, subject to gravity, or may be energy stored in springs.
There is a difference between turning off a machine and actually disengaging or de-energizing a piece of equipment. When you turn off a control switch, you are opening a circuit. There is still electrical energy at the switch, and a short in the switch or someone inadvertently turning on the machine may start the machine running again.

Injuries can also still occur even when the control switch is turned off by the energy still in the machine which should have been blocked. The moving parts of the machine either continued to coast, or the parts moved when the jam-up was cleared. Other accidents have occurred when the control switch on a machine was turned off, but a short in the switch restarted the machine. Or a crucial step was not performed for a complete lockout procedure.

To prevent these kinds of lockout/blockout accidents, USSI Global requires every employee to maintain an accident prevention program which shall include but not be limited to the following:

- A training program designed to instruct employees in general safe work practices, plus specific instruction with regard to hazards unique to any job assignment.
- Scheduled periodic inspections to identify and correct any unsafe conditions and work practices that may be found. The employer shall correct unsafe conditions and work practices found as a result of the required inspections.

To be effective, a lockout/blockout program should include:

A survey of the equipment by responsible persons who are thoroughly familiar with its operation and associated hazards, in order to identify which machinery should be locked and blocked out.
Identification and labeling of lockout devices.
Selection and purchase of locks, tags and blocks.
Equipment Survey:
Identifying & Labeling the Energy Disconnecting Means
Make an initial survey of the plant or operation to identify all energy sources.
This must be done by physical inspection, possibly in combination with a study of drawings and equipment manuals.

Locate and mark the disconnecting means, indicating their function. Categorize the identification details as to equipment supplied and energy type and magnitude, from material worked out beforehand in this lockout/blockout program planning study.

Example:
Line #1, Press #4, Electrical 480 volts
A sign or sticker—"LOCKOUT HERE"—placed at the disconnecting means will help direct workers to correct lockout devices. After surveying the operation, additional and more practical means may be installed. In complicated operations, schematics of just the disconnecting means may need to be drawn up by the plant's engineering department.

Methods of Locking Out Controls
There are many different ways to lock out a piece of equipment. Commonly, the main disconnect switch has one opening where a lock can be placed.
If more than one employee works on the equipment, a lockout adaptor suitable for the installation of several locks must be used, enabling all workers to lock out the machine with their individual locks.
If the switches are in a metal box, the box itself must be locked out.
If a fuse was removed in order to de-energize the equipment, the fuse box must be locked.
If the controls are in a metal-covered box, a common hasp can be welded or riveted to the door, along with a lock staple. Then the switch can be "opened" and the door closed and padlocked.
Fuse boxes can also be locked in this way.
Machines activated by compressed air or steam will have valves that control movement. These valves will need not only to be locked out, but also bled to release any back pressure.

Lockout Procedure Requirements

1. All maintenance personnel are issued a suitable lock (or locks). The lock has the individual worker's name and other identification on it. Each worker has the only key to the lock.
2. The worker checks to be sure that no one is operating the machinery BEFORE turning off the power. The machine operator is informed before the power is turned off. Sudden loss of power could cause an accident.
3. Steam, air, and hydraulic lines should be bled, drained, and cleaned out. There should be no pressure in these lines or in reservoir tanks.
4. Any mechanism under load or pressure, such as springs, should be released and blocked.
5. Each person who will be working on the machinery should put a lock on the machine's lockout device(s). Each lock must remain on the machine until the work is completed. Only the worker who placed the lock should remove his/her lock.
6. All energy sources which could activate the machine must be locked out.
7. The main valve or main electrical disconnect must be tested to be sure that the power to the machine is off.
8. Electrical circuits must be checked by qualified persons with proper and calibrated electrical testing equipment. An electrical failure could energize the equipment, even if the switch is in the off position. Stored energy in electrical capacitators should be safely discharged.
9. CAUTION: Return disconnects and operating controls to the off position after each test.
10. Attach accident prevention tags which give the reason for placing the tag, the name of the person placing the tag, how he/she may be contacted, and the date and time the tag was placed. No one removes the lock without proper authority.

Locks, Blocks, & Accident Prevention Tags

Locks
Each worker must have his/her own lock and the only key to that lock.
The lock should be substantial and durable, and should have the name of the employee on it. In addition, locks can be color-coded to indicate different shifts or types of crafts.
When more than one worker is servicing a piece of equipment that must be locked out, a lockout adaptor can be used which allows all the workers to place their locks on the disconnecting means. After the work is completed, each worker removes his/her lock and the machine is then returned to service.

Blocks
Suitable blocks are another important safety device for making a piece of equipment safe to be repaired or serviced. Blocks must

be placed under raised dies, lifts, or any equipment that might inadvertently move by sliding, falling or rolling.
Blocks, special brackets, or special stands such as those commonly used under raised vehicles, must be available and always used. Another form of blocking is the placement of a blind. A blind is a disk of metal placed in a pipe to ensure that no air, steam, or other substance will pass through that point if the system is accidentally activated.
Before installing blinds or blocks, bleed down steam, air, or hydraulic lines to get rid of any pressure. Coiled springs, spring-loaded devices, or suspended loads must also be released so that their stored energy will not result in inadvertent movement.
In large and complex facilities, permits signed by designated supervisors should be obtained before a lockout is begun. A signed permit is particularly important if maintenance work is being performed by an outside contractor who may be familiar with the particular piece of equipment being serviced, but who will not know about the plant's operation overall.

Tags
DO NOT USE TAGS ALONE. Use tags or signs in addition to locks.
Tags must state the:
reason for the lockout.
name of the employee who is working on the equipment and how that person may be reached.
date and time the tag was put in place.
Tagout devices shall be capable of enduring at least 50 pounds of pull, and a non-reusable type.

HOUSE KEEPING

Good housekeeping is essential to prevent the development of fire and safety hazards.
To eliminate tripping and slipping hazards:
Pick up all loose objects.
Isolate spills with barricades or signs and clean them up immediately.
Dispose of waste in designated containers.
Work areas, storage areas, floors, walkways must be kept clean and unobstructed.
Keep emergency equipment and exits accessible.
All objects and equipment must be stored neatly and securely, in a place where they do not obstruct operations.
Don’t block fire equipment or emergency shutoff switches.
The perimeter of the Service Provider work area will be roped off or similarly defined to the extent feasible to deter unauthorized access by unauthorized personnel.

TOOLS:

Service Provider shall supply the equipment necessary for safe performance of the work. All tools and equipment are to be in good working condition and are subject to inspection and approval by USSI Global. No Customer owned equipment or tools are to be used without permission of the USSI Global Project Manager. Service Provider is to identify any of their employees who will use USSI Global's Customers' equipment and to certify that any such Service Provider employee is qualified to do so. If training in the use of any such equipment is required, USSI Global's Customer will provide necessary information to the Service Provider, who in turn will be responsible for training its own employees.

Hand Tools Safety

Hand and power tools are a common part of our everyday lives and are present in nearly every industry. However, these simple tools can be hazardous, and have the potential for causing severe injuries when used or maintained improperly. Special attention toward hand and power tool safety is necessary in order to reduce or eliminate these hazards.

The following guidelines will help insure safe use of hand and power tools:

- Always use the correct tool for the job.
- Substitute tools may damage material and can be dangerous.
- Check your tools carefully before you use them. If the heads on striking tools such as chisels are mushroomed or burred, have them dressed.
- Replace splintered, broken, or loose handles before you use the tool.
- Take care of your tools. Keep them clean and in good condition.
- Store your tools properly and put them away when you are finished.

- Refrain from carrying sharp and pointed tools in your pockets. A trip or a slip could result in an injury.
- Do not apply leverage, such as a pipe extender (cheater bar), to hand tools to exert more force.
- Protect your eyes. When you are chipping, grinding or doing any other work that would cause particles to fly, keep your eyes safe by wearing the right eye protection. The use of goggles or face shield in addition to safety glasses with side shields provides additional protection.

Portable Power Tools

Portable 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, etc.

The following general precautions should be observed by power tool users:

- Never carry a tool by the cord or hose.
- Never yank the cord or the hose to disconnect it 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 away 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 from use and tagged "Do Not Use."
- Verify that portable tools are grounded. The 3-prong plug must be used in a grounded 3-prong receptacle. The round wire prong must never be removed in order to "fit" a 2-prong receptacle.
- Use air powered and low voltage tools for special hazard jobs.
- If you have to use portable electric tools in a damp, wet or other conductive environments, be sure they have the proper insulation and grounding protection.
- Refer to the building mechanical plans before drilling or cutting into walls, floors, ceilings, etc.

Grounding Assurance

USSI Global employees and Service Providers are required to follow the grounding specifications that are set forth by the customer in the customer Statement of Work that they are working.

WORKING OVERHEAD OR IN EXCAVATIONS:

Service Provider scaffolds and ladders will be designed and used in accordance with OSHA. Ladder use requirements are designed to ensure worker's safety. Never use boxes, chairs, drums or other objects in lieu of a ladder. Never use a ladder for any purpose other than the one for which it was designed. When working in excavations, the Service Provider will ensure that a standard guardrail or similar protection is provided at the top of the excavation and that proper "shoring" and/or bracing is in place as required by OSHA.

Fall Protection Program guidelines protect all employees engaged in outdoor or indoor work activities that expose them to potential falls from elevations. This fall protection program will be continually improved upon to prevent all falls from occurring.

Fall protection shall be utilized 100% when working from all unprotected surfaces four (4) feet or greater in height. For other than walking/working surfaces 100% fall protection shall be utilized for work six (6) feet or greater in height.

Definitions
Authorized Person: A person approved or assigned by the employer to perform a specific type of duty or duties or to be at a specific location or job site.

Competent Person: A person capable of identifying existing and predictable hazards in the surroundings or working conditions, which are hazardous or dangerous to employees. A person who has the authorization to take prompt corrective action to eliminate such hazards.

Qualified Person: An individual, who by possession of a recognized degree, certificate, or professional standing or who by extensive knowledge, training, and experience, has successfully demonstrated his/her ability to solve or resolve problems relating to the subject matter, work, or project.

Anchor Point: A secure point of attachment for lifelines, lanyards, or deceleration devices. An anchor point must be capable of supporting at least 5000 pounds (3600 pounds if engineered/certified by a qualified person) per person and must be independent of any anchorage being used to support or suspend platforms.

Full Body Harness: Webbing/straps which are secured about an employee's body in a manner that will distribute the fall arrest forces over the thighs, pelvis, waist, chest and shoulders. Having means for attaching it to other components of a personal fall arrest system, preferably at the shoulders and/or middle of the back.

Connector: A device which is used to connect parts of the personal fall arrest system together.
Deceleration Device: Any mechanism, such as a rope grab, rip-stitch lanyard, a specially woven lanyard, tearing or deforming lanyard, automatic self-retracting lifeline/lanyard, etc., which serves to dissipate a substantial amount of energy during a fall arrest.

Deceleration Distance: The additional vertical distance a falling employee travels excluding lifeline elongation and free fall distance, before stopping, from the point at which the deceleration device begins to operate. It is measured as the distance between the location of an employee's body harness attachment point at the moment of activation of the deceleration device during a fall, and the location of that attachment point after the employee comes to a full stop.

Free Fall: The act of falling before a personal fall arrest system begins to apply force to arrest the fall.

Free Fall Distance: The vertical displacement of the fall arrest attachment point on the employee's body harness between the onset of the fall and just before the system begins to apply force to arrest the fall. Free fall distance must not exceed 6 feet. This distance excludes deceleration distance and lifeline/lanyard elongation distance.

Total Fall Distance: The maximum vertical change in distance from the bottom of an individual's feet at the onset of a fall, to the position of the feet after the fall is arrested. This includes the free fall distance and the deceleration distance.

Guardrail System: A barrier erected to prevent employees from falling to lower levels. This system includes a toeboard, midrail and toprail able to withstand 200 pounds of force applied in any direction.

Lanyard: A flexible line of rope or strap that has self-locking snaphook connectors at each end for connecting to body harnesses, deceleration devices, and anchor points.

Leading Edge: The edge of a floor, roof, or other walking/working surface, which changes location as additional floor, roof, etc., is placed or constructed. A leading edge is considered an unprotected side or edge when not under active construction.

Lifeline: A component consisting of a flexible line for connection to an anchorage at one end to hang vertically (vertical lifeline), or for connection to anchorages at both ends to stretch horizontally (horizontal lifeline). This serves as a means for connecting other components of a personal fall arrest system to the anchorage.

Low Slope Roof: A roof having a slope of less than or equal to 4 in 12 (vertical to horizontal). A roof with approximately a 19.5 degree slope or less.

Personal Fall Arrest System: A system used to arrest (catch) an employee in a fall from a working level. It consists of an anchorage location, connectors, a body harness, and may include a lanyard, deceleration device, lifeline, or any combination of the before-mentioned items.

Rope Grab: A deceleration device, which travels on a lifeline and automatically, by friction, engages the lifeline and locks to arrest the fall of an employee.

Roof Work: The hoisting, storage, installation, repair, and removal of materials or equipment on the roof.

Safety Monitoring System: A safety system in which a competent person is responsible for recognizing and warning employees of fall hazards. All other fall protection systems must be deemed "infeasible" (through infeasibility study/review) to select/use a safety monitoring system.

Snaphook: A connector comprised of a hook-shaped member with a closed keeper which may be opened to permit the hook to receive an object and when released, automatically closes to retain the object. Snaphooks must be self-closing with a self-locking keeper which remains closed and locked until unlocked and pressed open for connection or disconnection, thus preventing the opportunity for the object to "rollout"of the snaphook.

Steep Slope Roof: A roof having a slope greater than 4 in 12 (vertical to horizontal). A roof with a slope greater than 19.5 degrees.

Toeboard: A low protective barrier that will prevent the fall of materials and equipment to lower levels, usually 4 inches or greater in height.

Unprotected Sides and Edges: Any side or edge of a walking or working surface (e.g., floor, roof, ramp, runway, etc.) where there is no guardrail at least 39 inches high.
Warning Line System: A barrier erected on a roof to warn employees that they are approaching an unprotected roof side or edge, which designates an area in which work can be conducted without the use of guardrails, personal fall arrest systems, or safety nets to protect employees in the area. This will be utilized on any roof greater than 50 feet wide and in conjunction with a safety monitor only where the other forms of fall protection have been deemed infeasible to use.

Types of Fall Protection Systems

1) An articulating man lift provided with a restraint system and full body harness to an anchor point below the waist (preferably at the floor level).
2) Guardrail with a toeboard, midrail and toprail.
3) Personal fall arrest systems.
    a) Anchor points (rated at 5000 pounds per person).
    b) Full body harness.
    c) Restraint line or lanyard.
    d) Retractable lanyard.
    e) Rope grabs.
    f) Connectors (self-locking snaphooks).
4) Engineered lifelines.
5) Warning lines.
6) Safety nets.
7) Safety monitor systems.

Appropriate fall protection will be determined by the task (job) to be performed.

Fall Protection Locations

Fall protection is required wherever the potential to fall 6 feet or more exists. USSI Global has identified the following places concerning fall protection:

1) If falls hazards of 10 feet or more exist, you must provide a written plan which identifies:
    a. All fall hazards in the work area.
    b. The methods you and your employees will use to eliminate and control them.
    c. Correct procedures for assembly, maintenance, inspection, an disassembly of fall protection systems used

d. Correct procedures for handling, storage, and securing of tools and materials.
e. The method of providing overhead protection
f. The method for prompt, safe removal of injured workers

2) All flat and low sloped roof locations, when within 6 feet of the roof edge or during roof repair/maintenance (4:12 pitch or less).
   a. Warning lines shall be placed 15ft away from the roof edge.
2) All exterior and interior equipment platforms, catwalks, antennas/towers, etc.
3) All exterior and interior fixed ladders above 20 feet.
4) All mezzanine and balcony edges.
5) All open excavations or pits.
6) All tasks requiring use of the articulating man lifts.
7) All tasks requiring employees to lean outside the vertical rails of ladders (i.e., painting, stairwell light bulb replacement, etc.).
8) Scaffolding erection – 10 feet in height or greater.
9) Gym- mezzanine/catwalk areas – whenever an employee must step outside the catwalk, additional fall protection (i.e., 6-foot lanyard to full body harness, self-retracting lanyard or rope grab system) shall be used. Fall protection is not needed if an employee or employees are on a low slope roof for **inspection/observation only!**

Fall Protection Guidelines – Options

Engineering Controls

This should always be the first option for selection whenever possible (e.g., light bulb changing→telescoping arm, changing valve→relocate at ground level, etc.) or utilizing a contractor in extremely hazardous areas.

Guardrails

On all projects, only guardrails made from steel, wood, and wire rope will be acceptable. All guardrail systems will comply with the current Department of Commerce/OSHA standards (i.e., contain a 42" high toprail, a midrail and toeboard, which can withstand 200 pounds of force in any direction,). These guardrails will be placed in the following areas if necessary or feasible based on job location or requirements:

1) On all open sided floors.
2) Around all open excavations or pits.
3) On leading edges of roofs or mezzanines.

Ladder safety

- Inspect before use for physical defects.
- Ladders are not to be painted except for numbering purposes.
- Do not use ladders for skids, braces, workbenches, or any purpose other than climbing.
- When you are ascending or descending a ladder, do not carry objects that will prevent you from grasping the ladder with both hands.
- Always face the ladder when ascending and descending.
- If you must place a ladder over a doorway, barricade the door to prevent its use and post a warning sign.
- Only one person is allowed on a ladder at a time.
- Do not jump from a ladder when descending.
- All joints between steps, rungs, and side rails must be tight.

- Safety feet must be in good working order and in place.
- Rungs must be free of grease and/or oil.
- All ladders that are used on the jobsite or plant site shall meet the ladder requirements of the 29 CFR 1926 Standards.
- All ladders that are used on the jobsite or plant site shall be used in compliance with 29 CFR 1926 Standards.
- Ladders that are broken, weak, or with missing rungs shall not be used. If the ladder cannot be repaired it will be removed from the job site immediately.
- Sections of ladders will not be lashed or tied together to increase overall length.
- Planks shall not be used on the top of stepladders.
- Never stand on the top step of a step ladder.
- Stepladders are not to be used in place of an extension ladders.
- Extension ladders shall extend 3 feet above the object it is leaned on.
- Extension ladders shall be tied off.

Stepladders

- Do not place tools or materials on the steps or platform of a stepladder
- Do not use the top two steps of a stepladder as a step or stand.
- Always level all four feet and lock spreaders in place.
- Do not use a stepladder as a straight ladder.

Straight type or extension ladders

- All straight or extension ladders must extend at least three feet beyond the supporting object when used as an access to an elevated work area.
- After raising the extension portion of a two or more stage ladder to the desired height, check to ensure that the safety dogs or latches are engaged.
- All extension or straight ladders must be secured or tied off at the top.
- All ladders must be equipped with safety (non-skid) feet.
- Portable ladders must be used at such a pitch that the horizontal distance from the top support to the foot of the ladder is about one-quarter of the working length of the ladder.
- All ladders that are used on the jobsite or plant site shall meet the ladder requirements of the 29 CFR 1926 Standards.
- All ladders that are used on the jobsite or plant site shall be used in compliance with 29 CFR 1926 Standards.
- Ladders that are broken, weak, or with missing rungs shall not be used. If the ladder cannot be repaired it will be removed from the job site immediately.
- Sections of ladders will not be lashed or tied together to increase overall length.
- Planks shall not be used on the top of stepladders.

- Never stand on the top step of a step ladder.
- Stepladders are not to be used in place of an extension ladders.
- Extension ladders shall extend 3 feet above the object it is leaned on.
- Extension ladders shall be tied off.

Stairways

1. Stairways having four or more risers or rising more than 30 inches or whichever is less, shall be equipped with:

    a. At least one handrail; and
    b. One stair rail system along each unprotected side or edge.

2. Metal pan treads and landings, when used for access prior to completion, shall be fitted with secured, temporary fillers long and high enough to cover the entire area.

Scaffold Safety Rules

1. General

    Before starting work on a scaffold, inspect it for the following:

    a. Are guardrails, toeboards, and planking in place and secure?
        i. NOTE: Guard Rails are required for scaffolding over 6ft

    b. Are locking pins at each joint in place?

    c. Are all wheels on moveable scaffolds locked?

2. Do not attempt to gain access to a scaffold by climbing on it (unless it is specifically designed for climbing – always use a ladder.

3. Scaffolds and their components must be capable of supporting four times the maximum intended load.

4. Any scaffold, including accessories such as braces, brackets, trusses, screw legs, ladders, etc., damaged or weakened in any way, must be immediately repaired or replaced.

5. Scaffold planks must extend over their end supports not less than 6 inches or more than 12 inches, unless otherwise specifically required.

6. Scaffold platforms must be at least 18 inches wide unless otherwise specifically required or exempted.

7. Where persons are required to work or pass under the scaffold, scaffolds shall be provided with a screen between the toeboard and guardrail, extending along the entire opening. The screen must be made of No. 18 gauge U.S. Standard wire, ½ inch mesh or equivalent protection.

8. All scaffolds must be erected level and plumb, and on a solid footing.

9. Do not change or remove scaffold members unless authorized.

10. Do not allow workers to ride on a rolling scaffold when it is being moved. Remove or secure all materials and tools on deck before moving.

11. Do not alter any scaffold member by welding, burning, cutting, drilling, or bending.

OSHA says that a competent person is an individual who:

- is able to identify or predict the possible hazards of using a specific type of scaffolding on the work site;
- knows how to control these hazards; and
- has the authority and responsibility to take the necessary steps to control the hazards.

Scaffold Tagging and Inspection :

1. Inspection and tagging of the scaffold is to be performed by a competent worker experienced in the erection of scaffold.
2. A unique scaffold identification tag number must be clearly identified on all tags for tracking purposes.
3. All scaffolds shall be inspected after the erection as per the Occupational Health and Safety Act requirements.
4. All scaffold identification tags will be of a solid green, yellow, or red color with black lettering.
5. All scaffold identification tags will have the front information displayed and must be completed for each tag.
    - Date Erected / Tagged
    - Inspected By: Name (print & signature)
    - Inspection Date
    - Department or Group Responsible for Erection/Maintaining/Dismantling on the reverse.
6. It is common practice to use the following color schemes:
    - Green - tags will be hung on scaffolds that have been inspected and are safe for use. A green "SAFE FOR USE" tag(s), and should be attached to the scaffold at each access point after the initial inspection is complete.
    - Yellow - "CAUTION" tag(s), will replace all green "Safe Scaffold" tag(s) whenever the scaffold has been modified to meet work requirements, and as a result could present a hazard to the user. This tag indicates special requirements for safe use. The tag as a minimum requirement will have:
        - The unusual or potential hazard marked on the reverse.
        - The preventative measures that must be taken prior to use to mitigate the hazard marked on the reverse.
        - The name of the client company representative authorizing the use of the Yellow tagged scaffold.
        - The yellow tag should not to be removed until the scaffold has been returned to a safe condition and an inspection by a "competent person" has been completed. Based on the results of that inspection the appropriate tag (red or green) will be hung on the scaffold and the yellow tag removed.

      NOTE: Use of the "yellow tag" status is not intended to override the green tag system. All efforts should be made to return the scaffold to a "Green Tag" status as soon as possible.
    - Red " DANGER – UNSAFE FOR USE" tag(s), will be used during erection or dismantling when the scaffold is left unattended and replace all green "Safe for Use " tag(s) or yellow "Caution / Hazard " tag(s) in the event a scaffold has been deemed unfit for use. The tag(s) as a minimum requirement will include:
        - The work order number or project number, the inspection date and the name of the person who performed the inspection filled in on the front of the card.
        - The designation, under erection, being dismantled, repairs required or overhead protection only, marked on the reverse.

Scaffold re-inspections must be completed any time when conditions may have changed causing the integrity of the scaffold to be suspect

Scaffold Erection

What are the responsibilities of a competent person?
The competent person supervises all work involving scaffolds.
These specific tasks include:

- erecting, moving dismantling, or altering the scaffolding;
- inspecting the scaffold for visible defects before each shift and after any changes are made;
- ensuring that defective parts are replaced immediately;
- ensuring that workers can get on and off the scaffold safely;
- training workers to recognize hazards; and
- determining if it is safe to work on a scaffold during storms, bad weather (such as icy conditions), or high winds.
- Guard rail required for scaffolding over 6ft

Excavation and Trenching

There are many different types of trenching and excavations performed. All trenching and excavation activity must follow 29 CFR Part 1926 standards of the Occupational Safety and Health Administration (OSHA).

- A competent person shall be required at the site at all times.
- The competent person shall conduct inspection of the trench or excavation daily, prior to work being performed. Inspections shall be conducted if any changes in weather conditions that could possibly make the work site unstable.
- Hard hats and other personal protective equipment must be worn at all times.
- Employees exposed to vehicular traffic shall wear reflective orange/ green vests or equivalent clothing.
- It is defined as a trench when the depth exceeds the width. Excavations more than 15 feet wide at the bottom are not trenches despite the depth. Trenches more than 5 feet in depth must either be shored, supported or the excess height laid back (sloped).
- Before digging a trench or an excavation opening, check with local utilities e.g., sewer lines, telephone lines, water lines, fuel lines, and electric lines.
- All trenches more than 5 feet deep have to conform to OSHA regulations for sloping/shoring depending on the soil type A ,B, or C (see OSHA Standards 1926.650 Subpart P). 27
- Access/egress to or from a trench (ladders, ramps, stairways) is to be provided every 25 feet along the trench. All extension ladders shall extend 36 inches above the trench.
- In excavations which employees may be required to enter, the spoil piles shall be placed at least 2 feet or more away from the edge of the trench.
- No employee will be permitted under loads handled by shovels, buckets, or hoists.
- Where employees or equipment are allowed to cross over excavations, all walkways and/or bridges will have guardrails. Guardrails will be built in compliance with 29 CFR 1926 Standards.
- All excavating or trenching activities will be in compliance with OSHA Standards.

Personal Fall Protection Systems

All employees on any project that will be required to wear a personal fall arrest or restraint system will follow these guidelines:

1) A full body harness will be used at all times.
2) Only shock absorbing lanyards or retractable lanyards are to be used so as to keep impact forces at a minimum on the body.
3) Only nylon rope or nylon straps with locking snaphooks are to be used for restraints.
4) All lanyards will have self-locking snaphooks.
5) The employee will inspect all personal fall arrest equipment before each use. Any deteriorated, bent, damaged, impacted, and/or harness showing excessive wear will be removed from service. The maximum free fall distance is not to exceed 6 feet.
Consideration must be given to the total fall distance.

The following factors can affect total fall distance:

1) Length of connecting means (i.e., lanyard length, use of carabiners, snaphooks, etc.)
2) Position and height of anchorage relative to work platform/area (always keep above the head whenever possible).
3) Position of attachment and D-ring slide on the full body harness.

4) Deployment of shock absorber (max. 42").
5) Movement in the lifeline.
6) Initial position of worker before free fall occurs (i.e., sitting, standing, etc.).

Calculating Total Fall Distance
It is the total length of shock absorbing lanyard + height of the person +the location distance of the D-ring from the work surface or platform. Always allow a minimum of 6 feet of clearance above the ground, equipment, etc., at the end of the fall from the fall arrest point.

Engineered Lifeline
Lifeline systems must be designed and approved by an engineer or qualified person. Lifeline systems must be engineered to have appropriate anchorages, strength of line designed to hold X number of individuals connected to it, line strength to aid in the arrest of a fall, and durability to hold a fallen employee(s) suspended until a rescue can occur.

Warning Line System
All work on a flat roof greater than 50 feet wide, which is performed 6 feet or further back from the edge of the roof can be completed by installing a Warning Line and using a safety monitor. If the roof is flat and less that 50 feet wide, a competent person safety monitor may be used. Warning Lines will consist of the following:

1) Will be erected 6 feet from the edge of the roof.
2) Be constructed of stationary posts made of wood or metal.
3) Wire or nylon rope and "Caution" tape will be strung from post to post and must be able to withstand 16 pounds of force.
4) The warning line will guard the entire perimeter of the roof where work is being performed. If an employee must access an area within 6 feet of the roof's edge, for reasons other than exiting the roof via a ladder or fixed industrial ladder, another employee must monitor that individual and warn him/her of any dangers. If another employee is not available to act as a safety monitor, then the employee must don a full body harness and attach a fall restraint lanyard to an anchor point to prevent reaching the edge of the roof.

Inspection of Fall Protection Systems
The following criteria will be utilized to maintain all equipment in good working condition:

Full Body Harnesses

1) Inspect before each use.
   a) Closely examine all of the nylon webbing to ensure there are no burn marks, which could weaken the material.
   b) Verify there are no torn, frayed or broken fibers, pulled stitches, or frayed edges anywhere on the harness.
   c) Examine the D-ring for excessive wear, pits, deterioration, or cracks.
   d) Verify that buckles are not deformed, cracked, and operate correctly.
   e) Check to see that each grommet (if present) is secure and not deformed from abuse or a fall.
   f) The harness should never have additional punched holes.
   g) All rivets should be tight and not deformed.
   h) Check tongue/straps for excessive wear from repeated buckling.
2) A competent person will complete an annual inspection of all harnesses and documentation will be maintained.
3) Storage will consist of hanging in an enclosed cabinet, to protect from damage.
4) All harnesses that are involved in a fall will be destroyed.

Lanyards/Shock Absorbing Lanyards

1) Inspect before each use.
   a) Check lanyard material for cuts, burns, abrasions, kinks, knots, broken stitches and excessive wear.
   b) Inspect the snaphooks for distortions in the hook, locks, and eye.
   c) Check carabiner for excessive wear, distortion, and lock operation.
   d) Ensure that all locking mechanisms seat and lock properly.
   e) Once locked, locking mechanism should prevent hook from opening.
   f) Visually inspect shock absorber for any signs of damage, paying close attention to where the shock absorber attaches to the lanyard.
   g) Verify that points where the lanyard attaches to the snaphooks are free of defects.

2) A competent person will complete an annual inspection of all lanyards and documentation will be maintained.
3) Storage will consist of hanging in an enclosed cabinet, to protect from damage.
4) All lanyards that are involved in a fall will be destroyed.

Snaphooks

1) Inspect before each use.
   a) Inspect snaphook for any hook and eye distortions.
   b) Verify there are no cracks or pitted surfaces.
   c) The keeper latch should not be bent, distorted, or obstructed.
   d) Verify that the keeper latch seats into the nose without binding.
   e) Verify that the keeper spring securely closes the keeper latch.
   f) Test the locking mechanism to verify that the keeper latch locks properly.
2) A competent person will complete an annual inspection of all snaphooks and documentation will be maintained.
3) All snaphooks involved in a fall will be destroyed.

Self-Retracting Lanyards/Lifelines

1) Inspect before each use.
   a) Visually inspect the body to ensure there is no physical damage to the body.
   b) Make sure all nuts and rivets are tight.
   c) Make sure the entire length of the nylon strap/wire rope is free from any cuts, burns, abrasions, kinks, knots, broken stitches/strands, excessive wear and retracts freely.
   d) Test the unit by pulling sharply on the lanyard/lifeline to verify that the locking mechanism is operating correctly.
   e) If the manufacturer requires, make certain the retractable lanyard is returned to the manufacturer for scheduled annual inspections.
2) A competent person will conduct monthly inspection of all self-retracting lanyards/lifelines and documentation will be maintained.
3) Service per manufacturer specifications (1-2 years).
4) Inspect for proper function after every fall.

Tie-Off Adapters/Anchorages

1) Inspect for integrity and attachment to solid surface.
2) A competent person will complete an annual inspection of all tieoffs and anchorages and documentation will be maintained.
3) All tie-offs and anchorages will be destroyed after a fall.

Articulating Man Lift

1) Inspect before each use.
2) Inspect/service per manufacturer guidelines. Forklift, scissors lifts, and safety nets will be inspected at the beginning of each shift in use. Structural integrity of the forklift basket will be checked per the same schedule.
3) A competent person will complete an annual inspection of the forklift basket and documentation will be maintained.

Horizontal Lifelines

1) Inspect before each use for structural integrity of line and anchors.
2) A competent person will complete an annual inspection.

Aerial Lifts

*Only trained individuals will be allowed to operate aerial lifts

What to Do Before Operating an Aerial Lift:

Pre-start Inspection

Prior to each work shift, conduct a pre-start inspection to verify that the equipment and all its components are in safe operating condition. Prior to using the lift verify the lift has a proper swing radius protection and there is protection in place to prevent the lift from being struck by vehicles. Follow the manufacturer's recommendations and include a check of:

Vehicle components

- Proper fluid levels (oil, hydraulic, fuel and coolant);
- Leaks of fluids;
- Wheels and tires;
- Battery and charger;
- Lower-level controls;
- Horn, gauges, lights and backup alarms;
- Steering and brakes.

Lift components

- Operating and emergency controls;
- Personal protective devices;
- Hydraulic, air, pneumatic, fuel and electrical systems;
- Fiberglass and other insulating components;
- Missing or unreadable placards, warnings, or operational, instructional and control markings;
- Mechanical fasteners and locking pins;
- Cable and wiring harnesses;
- Outriggers, stabilizers and other structures;
- Loose or missing parts;
- Guardrail systems.

Do not operate any aerial lift if any of these components are defective until it is repaired by a qualified person. Remove defective aerial lifts from service (tag out) until repairs are made.

WorkZone Inspections

Employers must assure that work zones are inspected for hazards and take corrective actions to eliminate such hazards before and during operation of an aerial lift. Items to look for include:

- Drop-offs, holes, or unstable surfaces such as loose dirt;
- Inadequate ceiling heights;
- Slopes, ditches, or bumps;
- Debris and floor obstructions;
- Overhead electric power lines and communication cables;
- Other overhead obstructions;
- Other hazardous locations and atmospheres;
- High wind and other severe weather conditions, such as ice; and
- The presence of others in close proximity to the work.

What to Do While Operating an Aerial Lift

Fall Protection:

- Ensure that access gates or openings are closed.
- Stand firmly on the floor of the bucket or lift platform.
- Do not climb on or lean over guardrails or handrails.
- Do not use planks, ladders, or other devices as a working position.

- Use a body harness or a restraining belt with a lanyard attached to the boom or bucket.
- Do not belt-off to adjacent structuresor poles while in the bucket.

Operation/Traveling/Loading:

- Do not exceed the load-capacity limits. Takethe combined weight of the worker(s), tools and materials into account when calculating the load.
- Do not use the aerial lift as a crane.
- Do not carry objects larger than the platform.
- Do not drive with the lift platformraised (unless the manufacturer's instructions allow this).
- Do not operate lower level controls unless permission is obtained from the worker(s)in the lift (except in emergencies).
- Do not exceed vertical or horizontal reach limits.
- Do not operate an aerial lift in high winds above those recommended by the manufacturer.
- Do not override hydraulic,mechanical, or electrical safety devices.

Overhead Protection:

- Be aware of overhead clearance and overhead objects, including ceilings.
- Do not positionaerial lifts between overhead hazards if possible.
- Treat all overhead power lines and communication cables as energized, and stay at least 10 feet (3 meters) away.
- Ensure that the power utility or power line workers de-energize power lines in the vicinity of the work.

Stability in the Work Zone:

- Set outriggers on pads or on a level, solid surface.
- Set brakes when outriggers are used.
- Use wheel chocks on sloped surfaces when it is safe to do so.
- Set up work zone warnings, such as cones and signs, when necessary to warn others.

Insulated aerial lifts offer protection from electric shock and electrocution by isolating you from electrical ground. However, an insulated aerial lift does not protect you if there is another path to ground (for instance, if you touch another wire). To maintain the effectiveness of the insulating device, do not drill holes in the bucket.

Standards that Apply

OSHA Standards:

29 CFR 1910.67, 29 CFR 1910.269(p), 29 CFR 1926.21, 29 CFR 1926.453, 29 CFR 1926.502.

American National Standards Institutes standards:

ANSI/SIA A92.2-1969, ANSI/SIA A92.3, ANSI/SIA A92.5, ANSI/SIA A92.6.

Additional Information

OSHA has a variety of publications, standards, technical assistance and compliance toolsto help you. OSHA also offers extensive assistance through workplace consultations, grants, strategic partnerships, state plans, training and education. OSHA's Safety and Health Program Management Guidelines (54 Federal Register 3904-3916,January 26, 1989) detail elements critical to the development of a successful safety and health program.

To file a complaint by phone, report an emergency, or get OSHA advice, assistance, or products, contact your nearest OSHA office or call us toll-free at 1-800-321-OSHA (6742).

This is one in a series of informational fact sheets highlighting OSHA programs, policies or standards. It does not impose any new compliancerequirements. For a comprehensivelist of compliance requirements of OSHA standards or regulations, refer toTitle 29 of the Code of FederalRegulations. This information will be made available to sensory-impairedindividuals upon request.The voice phone is (202) 693-1999; the teletypewriter (TTY) number is (877) 889-5627.

For assistance, contactus.We can help. It's confidential.

Occupational Safety and HealthAdministration www.osha.gov 1-800-321-6742

Forklift

***Only workers with verified training shall operate fork lifts.**

Basic Forklift Safety Practices

Here are a few common safety rules to follow during forklift operation:

1. Complete documented safety inspection prior to use.
2. Use the seat belt. It will keep you secured in the seat in the unplanned event of a tip over.
3. A parked forklift should have the forks flat on the floor with the controls set to neutral and with the parking brake set.
4. A forklift is considered to be "unattended" if the operator is more than 25 feet away or if the forklift is out of the direct vision of the operator. Unattended forklifts should be parked with the power turned off.
5. When operating the forklift on inclines, the load should always be on the uphill side of the incline. Drive forward going up the incline. Drive backward going down the incline.
6. When traveling without a load on the forks, keep the forks approximately four to six inches off the floor.
7. Never allow anyone to walk underneath a raised load.
8. Stop at all blind corners to check for other traffic in the area. This includes other forklifts and pedestrians. Honk your horn and look before you proceed.
9. If carrying a tall load that blocks your forward vision, drive in reverse and turn your head so you can see where you are going.
10. If operating around other forklifts maintain a three-forklift length distance between forklifts and never attempt passing.
11. Never drive a forklift up to the back of a person who is unaware that the forklift is behind them.
12. Verify the fork lift has an operating/audible back up alarm.

Guardrails

1) Temporary systems – Daily visual inspection will be completed by a competent person.
2) Temporary systems – Weekly, a complete structural inspection will be completed by a competent person.
3) Permanent systems – Annual structural inspections will be completed by a competent person with future frequency of inspection defined based on conditions/controls present.

Storage and Maintenance of Fall Protection Equipment

1) Never store the personal fall arrest equipment in the bottom of a toolbox, on the ground, or outdoors exposed to the elements (i.e., sun, rain, snow, etc.).
2) Hang equipment in a cool, dry location in a manner that retains its shape.
3) Always follow manufacturer recommendations for inspections.
4) Clean with a mild, nonabrasive soap and hang to dry.
5) Never force dry or use strong detergents in cleaning.
6) Never store equipment near excessive heat, chemicals, moisture, or sunlight.
7) Never store in an area with exposures to fumes or corrosive elements.
8) Avoid dirt or other types of build-up on equipment.
9) Never use this equipment for any purpose other than personal fall arrest.
10) Once exposed to a fall, remove equipment from service immediately.

Training **–** Document the attendance of all trainees.

All employees engaged in fall protection will be trained and have the knowledge to:

1) Recognize the fall hazards of/on their job sites.
2) Understand the hazards associated with working near fall hazards.
3) Work safely in hazardous areas by utilizing appropriate fall protection measures.
4) Understand and follow all components of this fall protection program.
5) Identify and understand the enforceable Department of Commerce/OSHA standards and ANSI standards that pertain to fall protection.

Enforcement

1) All staff is subject to discipline.
2) Documentation of any violations will be kept in the staff member's personnel file.

Rescue Procedures
Rescue Methods/Options of Fallen Personnel
In the unlikely event that a fall arrest occurs on-site, personnel with the use of an articulating man lift or ladders where feasible, will rescue all employees. Alternate rescue would be through the local emergency services.

Communication Issues
In the event of a fall, the following people will be notified as soon as possible.

1) Rescue personnel (i.e., maintenance personnel).
2) Manager/Supervisor.
3) Safety officer/coordinator
4) Fire Department and emergency medical services if necessary.

At the beginning of any work activity where fall protection is an issue, rescue plans must be identified and discussed with all employees in case of a fall. All employees involved in a fall arrest or fall will be sent immediately for a medical evaluation to determine the extent of injuries, if any.

Fall Investigation
The following documentation will be completed as part of the fall investigation:

1) Interviews with staff and witnesses.
2) Employee injury/accident report.
3) Supervisor injury/accident report.

Program Evaluation
This fall protection program will be evaluated periodically to determine the effectiveness. The following criteria will be used to evaluate its performance:

1) Accident reports
2) Number of accidents.
3) Management/staff compliance with program components.
4) Periodic on-site audits.
5) Staff feedback and interviews.

ACCIDENT/INCIDENT INVESTIGATION

We will conduct an investigation for all accidents/incidents and near misses. Our primary goal of conducting an investigation is to determine the "root cause" to prevent the risk of a future occurrence. Investigation reports can help determine injury and illness trends over time, so that patterns with common causes can be identified and prevented. Investigations are not intended to place blame.

Accidents and "near-miss" incidents will be investigated by (Name/Title). The reports will be reviewed by (Name/Safety Committee) within (Days/Hours) of an accident/incident.

ACCIDENT INVESTIGATION

All accidents resulting in injury or property damage will be investigated. The purpose of the investigation is NOT to find fault, but to find the cause of the accident so similar incidents can be prevented in the future.

1. All accidents, no matter how minor must be reported immediately.
2. The employee must complete an initial written accident investigation the day of the accident, if possible.
3. All workers involved in the accident or who witnessed the accident must complete a written statement describing the incident.
4. Near misses (situations where an accident almost happened) should be reported. Corrective action must be taken to prevent the same situation from occurring again with the potential for serious injury

Contractors
All outside contractors working in or on any customer premises will be required to follow the guidelines set forth in this fall protection program. Contractors in the pre-job meeting will be informed of these requirements as well as the on-site construction rules that apply.

UTILITIES:

The Service Provider shall not connect to or use any building utility without approval of the Project Manager or site contact. Any such connection must be inspected and approved by the Project Manager or site contact before such connection is placed in use. The Service Provider at the termination of use of such connection will remove any "temporary connection" to a utility. Lockout/Tag out procedures, as defined by the Project Manager or site contact, shall be followed. The Project Manager or site contact will provide equipment-specific energy control procedures to the Service Provider.

Call Before You Dig

811 is the phone number you call before digging to protect yourself and others from unintentionally hitting underground utility lines.

There are millions of miles of buried utilities beneath the surface of the earth that are vital to everyday living like water, electricity and natural gas.

811 is the federally designated call before you dig number that helps homeowners and professionals avoid damaging these vital utilities. When you make the **free** call to 811 a few days before you dig, you'll help prevent unintended consequences such as injury to you or your family, damage to your property, utility service outages to the entire neighborhood and potential fines and repair costs.

Conducting a Hazard Assessment

A determination of whether hazards are present or are likely to be present must be conducted. [29 CFR 1915.152(b)] If such hazards are present or are likely to be present the

Hazards to evaluate may include:

- Impact (falling objects, struck-by hazards, impact tools)
- Puncture and cuts (tools, knives, slag, nails, wire rope, sheet metal)
- Compression/Crushing (gears, struck-by hazards, shifting loads)
- Chemical (solvents, corrosives, paints, fumes)
- Heat/Cold (welding, burning, environmental temperatures)
- Burns (thermal, chemical)
- Vibration (pneumatic tools)
- Dust (heavy metals, silica)
- Light (optical) radiation (arc welding, lasers)
- Excessive noise (abrasive blasting, needle gunning, scaling, grinding, metal straightening)
- Falling (from elevations, into water)

- Drowning

CLOTHING:

Wear shirts that cover shoulders at all times. Complete arm protection may be required on some sites. Long pants are to be worn at all times. Open toed shoes are prohibited. Excessive jewelry such as ear/face piercing is prohibited.

PERSONAL PROTECTIVE EQUIPMENT:

All personal protective equipment is to be provided by the Service Provider or his employees, and must meet OSHA or other appropriate regulatory requirements. In general, Service Provider employees will wear hard hats unless it can be demonstrated that no head hazards exist. The Service Provider is to post signs to indicate where hard hats are to be worn. Substantial shoes are to be worn or other special safety shoes are to be worn as required by OSHA or other appropriate regulatory. Service Provider employees working in areas where hearing protection, eye protection, or other type protection is mandatory for USSI Global's Customers' employees will be required to wear equivalent protection

- 100% Hard Hat Policy
    - All employees are required to wear approved, non-metallic hard hats while on the work site at all times. This includes Contractors, subcontractors, vendors, suppliers, and visitors. Hard hats are designed, tested, and certified to be worn in only one position – with the liner securely in place and the bill turned forward. The only time employees are allowed to "reverse" their hard hats are when their work creates an absolute need to turn the hat backwards. For example, when welding hoods or face shields are designed to attach to the backside, when connectors are receiving a hoisted load, or when surveyors are looking through a transit or level. To provide full protection in those situations the suspensions shall be reversed. When those tasks are completed, the hard hats are to be restored to their correct positions. All protective headgear shall meet the requirements of ANSI Z89.1-1969. The use of "Cowboy" type hardhats is prohibited.
- Safety Glasses/Goggles Policy
    - All employees are required to wear safety glasses or goggles at all times while on the work site. Full-face protection, as provided by a face shield shall be required at all times when potential injury to the face itself exists. Work activities that require use of full face shields include, but are not limited to, grinding, "housekeeping blow downs" using compressed air, chipping concrete, cutting metal decking, chain saws, handling toxic or corrosive chemicals or liquids, using power-actuated tools, certain instances of drilling, and using jackhammers or air hammers. During steel erection activities to include reaming, drilling, welding and cutting. The use of a face shield does not preclude the requirement to utilize eye protection under it. Eye and face protection equipment shall meet the requirements specified in American National Standards Institute, Z87.1-2003.
- Footwear
    - Footwear made of leather or other equally firm material in the form of work shoes or boots shall be worn by all individuals while on the project site. Protective footwear shall comply with ANSI (American National Standard) Z41-1991. Traditional tennis shoes, shoes with canvas tops, or thin or soft sole athletic shoes, open toed sandals, slippers, dress shoes or other similar type shoes shall not be worn. Employees engaged in the use of soil compacting equipment shall utilize metatarsal protection.
- Appropriate Project Attire
    - The following minimum dress requirements apply to all employees, Contractors, Subcontractors, Vendors, and Visitors.
        - Tank tops, net shirts, cut-off shirts, or sleeveless shirts may not be worn. As a minimum, employees are required to wear a shirt top that is comparable to a T-shirt. Shirts must have a sleeve that covers the ball of the shoulder in the same manner as a T-shirt with a sleeve at least 4 inches long.
        - Pants must be full-length. Shorts, skirts and other such apparel are not permitted.
        - Clothing must not hang loose to the point where they can be caught in parts of moving machinery.
        - Employees that perform welding and cutting, operate rotating machinery, or are exposed to chemicals, fire, or other such hazards, must contain their beards and hair to a point where there

is no danger of their hair catching fire, dipping into chemicals, or being caught in rotating machinery.
        - Jewelry should be discouraged from being worn while working.
- Glove Policy
    - To reduce the possibility of hand injuries, the Contractor shall ensure that all employees working under their control, including subcontractors and sub-tiers, utilize gloves while working on Port Construction Projects. It is the responsibility of the Contractor to supply the proper glove for the task and train the employees in relation to WAC 296-800-16065. When the Contractor feels a greater risk of injury is imposed by the use of gloves, or the glove may require modification to perform a given task, it shall be documented on the Job Hazard Analysis form. Final selection of the best hand protection is the responsibility of the Contractor.
- Hearing Protection
    - Hearing protection shall be worn when working in areas posted as hazardous noise areas (airfield and runways), or when working around or using equipment that presents high noise hazards as identified through the Contractor's Hearing Conservation Program.

Hearing Conservation Program

United Service Source, Inc recognizes that exposure to loud noise can damage employees' hearing. The following work practices have been implemented to minimize the potential risks.

Introduction

- Appropriate hearing protection will be worn as specified by project supervisors. Hearing protection will be worn when it will provide greater safety and protection benefits.
- When working at a client's site, employees will adhere to the hearing-protection requirements of either the client or United Service Source, whichever requirements are more stringent.
- The requirements outlined below are mandatory while working in this company's workshop or on its projects. They apply to all employees, visitors and contractors.

Identification of Noise Sources

- Noise levels will be determined for all high noise areas and equipment.
- Representative monitoring will be performed to determine personnel exposures where appropriate.
- Equipment or areas with noise levels equal to or exceeding 85 dBA will be identified with labels or signs, which will be posted on the individual pieces of equipment (whether owned and leased) or at the entrance to noisy areas.
- The sign or label will state either "Hearing Protection Is Required While the Equipment Is Operating" or "Hearing Protection Is Required While Working in the Area" or similar wording, as appropriate.
- Equipment typically requiring labels includes but is not limited to compressors, forklifts, generators and pneumatic tools.
- Labels will be placed where the operator can readily see the warning, such as next to power switches.
- The requirements of this policy will be included in specifications when purchasing, renting or leasing equipment.

Reduction of Noise Levels

- Whenever practical, noise levels identified as exceeding 85 dBA will be reduced by means of engineering or administrative controls, including isolation, enclosure and application of noise reduction materials.
- Noise reduction ratings (NRRs) must be considered when selecting the type of hearing protection (ear plugs, ear muffs or both) for a particular job.

Hearing Protection

- Only company approved hearing protection will be used.
- Hearing protection will be worn at all times when noise levels are suspected of equaling or exceeding 90 dBA.
- Use of portable radios with earphones is prohibited at all times.

Training

- A current copy of the Occupational Noise Standard, 29 CFR 1926.52, will be posted in the company's main office. Copies will be made available to employees on request.
- Once each calendar year, training will be conducted for all employees who may be exposed to noise levels of 85 dBA

or greater.
- At a minimum, the training program will include a discussion of the following:
  - The purpose of hearing protection
  - The effectiveness, advantages and disadvantages of various types of hearing protection
  - Pertinent noise
  - monitoring results
  - Specific equipment and/or operations that produce high noise levels
  - The purpose of audiometric testing and an explanation of testing procedures
- Training records will be kept at the main office.

Responsibilities
- Each employee is responsible for:

O Following the instructions received in the training program
o Wearing proper hearing protection when needed
- Foremen and supervisors are responsible for ensuring:

O Hearing protection is used in areas or operations where such use is required
o Affected employees receive appropriate training and participate in annual audiometry as required
o High-noise areas and equipment are identified and labeled accordingly
- Management is responsible for:

O Determining whether noise reduction is feasible by means of engineering controls
o Ensuring adequate supplies of ear plugs or other well-maintained hearing protection devices are available
o Determining the adequacy of hearing-protection devices
o Assisting in training as necessary
o Coordinating and overseeing all audiometric testing

Audiometric testing is available to all USSI Global employees through their Health Insurance Program

Respiratory Protection

What is a respirator?

A respirator is a protective device that covers the nose and mouth or the entire face or head to guard the wearer against hazardous atmospheres. Respirators may be:

- Tight-fitting - that is, half masks, which cover the mouth and nose and full facepieces that cover the face from the hairline to below the chin; or
- Loose-fitting, such as hoods or helmets that cover the head completely.
- In addition, there are two major classes of respirators:
- Air-purifying, which remove contaminants from the air; and
- Atmosphere-supplying, which provide clean, breathable air from an uncontaminated source. As a general rule, atmosphere-supplying respirators are used for more hazardous exposures.

Why do employees need respirators?

When employees must work in environments with insufficient oxygen or where harmful dusts, fogs, smokes, mists, fumes, gases, vapors, or sprays are present, they need respirators. These health hazards may cause cancer, lung impairment, other diseases, or death.

Where toxic substances are present in the workplace and engineering controls are inadequate to reduce or eliminate them, respirators are necessary. Some atmosphere-supplying respirators can also be used to protect against oxygen-deficient atmospheres. Increased breathing rates, accelerated heartbeat, and impaired thinking or coordination occur more quickly in an oxygen-deficient or other hazardous atmosphere. Even a momentary loss of coordination can be devastating if it occurs while a worker is performing a potentially dangerous activity such as climbing a ladder.

When do employees need to wear respirators?

Employees need to wear respirators whenever engineering and work practice control measures are not adequate to prevent atmospheric contamination at the worksite. Strategies for preventing atmospheric contamination may include enclosing or confining the contaminant-producing operation, exhausting the contaminant, or substituting with less toxic materials.

Respirators have their limitations and are not a substitute for effective engineering and work practice controls. When it is not possible to use these controls to reduce airborne contaminants below their occupational exposure levels, such as during certain maintenance and repair operations, emergencies, or when engineering controls are being installed, respirator use may be the best or only way to reduce worker exposure. In other cases, where work practices and engineering controls alone cannot reduce exposure levels to below the occupational exposure level, respirator use is essential.

Where respirators are required to protect worker health, specific procedures are necessary to ensure the equipment's effectiveness.

How can you ensure proper protection?

OSHA's respirator standard[1] requires employers to establish and maintain an effective respiratory protection program when employees must wear respirators to protect against workplace hazards. Different hazards require different respirators, and employees are responsible for wearing the appropriate respirator and complying with the respiratory protection program.

The standard contains requirements for program administration, worksite-specific procedures, respirator selection, employee training, fit testing, medical evaluation, and respirator use, cleaning, maintenance, and repair.

Employees must use respirators while effective engineering controls, if they are feasible, are being installed. If engineering controls are not feasible, employers must provide respirators and employees must wear them when necessary to protect their health. The employee's equipment must be properly selected, used, and maintained for a particular work environment and contaminant. In addition, employers must train employees in all aspects of the respiratory protection program.

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1 OSHA's regulations cover general, construction, and maritime industries. See *Title 29 of the Code of Federal Regulations* (*CFR*), Part 1910.134; and the Compressed Gas Association's Commodity Specification G-7-1989, also referenced in 29 *CFR* Part 1910.134.

Procedures to Ensure Proper Protection

How do you develop an effective respiratory protection program?

The primary objective of the respiratory protection program is to prevent exposure to air contaminated with harmful dusts, fogs, fumes, mists, gases, smokes, vapors, or sprays, and thus to prevent occupational illness.

A program administrator must be responsible for the program. This person must know enough about respirators to supervise the program properly.

Larger plants or companies with industrial hygiene, in-house medical department, safety engineering, or fire prevention departments should administer the program in liaison with the program administrator. In smaller plants without specialists, an upper-level superintendent, foreman, or qualified person must serve as program administrator.

Any respirator program should stress thorough training of all respirator users. Employees must be aware that a respirator does not eliminate the hazard. If the respirator fails, the user will be overexposed to dangerous substances. To reduce the possibility of failure, the respirator must fit properly and be maintained in a clean and serviceable condition.

Employers and employees must understand the respirator's purpose and limitations. Users must not alter or remove the respirator even for a short time, even if it is uncomfortable.

An effective respirator program must cover the following factors:

- Written worksite specific procedures;
- Program evaluation;
- Selection of an appropriate respirator approved by the National Institute for Occupational Safety and Health (NIOSH);
- Training;
- Fit testing;
- Inspection, cleaning, maintenance, and storage;
- Medical evaluations;
- Work area surveillance; and
- Air quality standards.

Whenever OSHA standards or employers require respirator use, there must be a complete respiratory protection program. Employers must have written operating procedures to ensure that employees use the respirators safely and properly. Users must be familiar with these procedures and with the respirators available and their limitations.

In workplaces with no hazardous exposures, but where workers choose to use respirators voluntarily, certain written program elements may be necessary to prevent potential hazards associated with respirator use. Employers must evaluate whether respirator use itself may actually *harm* employees. If so, employers must medically evaluate employees and, if necessary, restrict respirator use, as well as comply with program elements. Employers must inform employees voluntarily using respirators of basic information in Appendix D of OSHA's respiratory protection standard.

Employers must evaluate the effectiveness of a company's respirator program regularly and modify the written operating procedure as necessary to reflect the evaluation results. A labor-management team may be effective in conducting these periodic evaluations.

How do you choose the correct respirator?

Choosing the right equipment involves:

- Determining what the hazard is and its extent,
- Considering user factors that affect respirator performance and reliability, and
- Selecting an appropriate NIOSH-certified respirator.

Equipment must be used in line with specifications accompanying the NIOSH certification.

When selecting respirators, employers must consider the chemical and physical properties of the contaminant, as well as the toxicity and concentration of the hazardous material and the amount of oxygen present. Other selection factors are nature and extent of the hazard, work rate, area to be covered, mobility, work requirements and conditions, as well as the limitations and characteristics of the available respirators.

Air-purifying respirators use filters or sorbents to remove harmful substances from the air. They range from simple disposable masks to sophisticated devices. They do not supply oxygen and must not be used in oxygen-deficient atmospheres or in other atmospheres that are immediately dangerous to life or health (IDLH).

Atmosphere-supplying respirators are designed to provide breathable air from a clean air source other than the surrounding contaminated work atmosphere. They include supplied-air respirators (SARs) and self-contained breathing apparatus (SCBA) units.

The time needed to perform a given task, including the time necessary to enter and leave a contaminated area, is an important factor in determining the type of respiratory protection needed. For example, SCBAs, gas masks, or air-purifying chemical-cartridge respirators provide respiratory protection for relatively short periods. On the other hand, an atmosphere-supplying respirator that supplies breathable air from an air compressor through an air line can provide protection for extended periods.

If the total concentration of atmospheric particulates is low, particulate filter air-purifying respirators can provide protection for long periods without the need to replace the filter. Where there are higher concentrations of contaminants, however, an atmosphere-supplying respirator such as the positive-pressure SAR offers better protection for a longer period.

SARs eliminate the need for concern about filter breakthrough times, change schedules, or using end-ofservice-life indicators (ESLI) for airborne toxic materials, factors that must be considered when using air-purifying respirators.

Respirators must not impair the worker's ability to see, hear, communicate, and move as necessary to perform the job safely. For example, atmosphere-supplying respirators may restrict movement and present other potential hazards. SARs with their trailing hoses can limit the area the wearer can cover and may present a hazard if the hose comes into contact with machinery. Similarly, a SCBA that includes a back-mounted, compressed-air cylinder is both large and heavy. This may restrict climbing and movement in tight places, and the added weight of the air cylinder presents an additional burden to the wearer.

Another factor to consider when using respirators is the air-supply rate. The wearer's work rate determines the volume of air breathed per minute. The volume of air supplied to meet the breathing requirements is very significant when using atmosphere-supplying respirators such as self-contained and airline respirators that use cylinders because this volume determines their operating life.

The peak airflow rate also is important in the use of a constant-flow SAR. The air-supply rate should always be greater than the maximum amount of air being inhaled in order to maintain the respiratory enclosure under positive pressure.

Higher breathing resistance of air-purifying respirators under conditions of heavy work may causer the user breathing difficulty, particularly in hot, humid conditions. To avoid placing additional stress on the wearer, use the lightest respirator possible that presents the least breathing resistance.

SCBAs and some chemical canister respirators provide a warning of remaining service time. This may be a pressure gauge or timer with an audible alarm for SCBAs or a color ESLI on the cartridge or canister. The user should understand the operation and limitations of each type of warning device. For the many gas masks and chemical-cartridge respirators with no ESLI devices, the employer must establish and enforce a cartridge or canister change schedule. In addition, employees should begin each work shift with new canisters and cartridges.

What are specific respirator uses?

The following list presents a simplified version of characteristics and factors used for respirator selection. It does not specify the contaminant concentrations or particle size. Some OSHA substance-specific standards include more detailed information on respirator selection.

Hazard	Respirator
Immediately dangerous to life or health (IDLH) 2	
Oxygen deficiency Gas, vapor contaminants and other highly toxic air contaminants	Full-facepiece, pressure-demand SCBA certified for a minimum service life of 30 minutes. A combination full-facepiece, pressure-demand SAR with an auxiliary self-contained air supply.
Contaminated atmospheres - for escape	Positive-pressure SCBA. Gas mask. Combination positive-pressure SAR with escape SCBA.
Not immediately dangerous to life or health	
Gas and vapor contaminants	Positive-pressure SAR. Gas mask. Chemical-cartridge or canister respirator.
Particulate contaminants	Positive-pressure SAR including abrasive blasting respirator. Powered air-purifying respirator equipped with high-efficiency filters. Any air-purifying respirator

	with a specific particulate filter.
Gaseous and particulate contaminants	Positive-pressure supplied respirator. Gas mask. Chemical-cartridge respirator with mechanical filters.
Smoke and other fire-related contaminants	Positive-pressure SCBA.

2 "Immediately dangerous to life or health" (IDLH) means an atmosphere that poses an immediate threat to life, would cause irreversible adverse health effects, or would impair an individual's ability to escape from a dangerous atmosphere.

Who needs to be trained?

Training is essential for correct respirator use. Employers must teach supervisors and workers how to properly select, use, and maintain respirators. All employees required to use respiratory protective equipment must receive instruction in the proper use of the equipment and its limitations. Employers should develop training programs based on the employee's education level and language background.

Training must be comprehensive enough for the employee to demonstrate a knowledge of the limitations and capabilities of the respirator, why the respirator is necessary, and how improper fit, usage, or maintenance can compromise the respirator.

Training must include an explanation of the following:

- Why respirator use is necessary;
- Nature of the respiratory hazard and consequences of not fitting, using, and maintaining the respirator properly;
- Reason(s) for selecting a particular type of respirator;
- Capabilities and limitations of the selected respirator;
- How to inspect, put on and remove, and check the seals of the respirator;
- Respirator maintenance and storage requirements;
- How to use the respirator effectively in emergency situations, including when the respirator malfunctions; and
- How to recognize medical signs and symptoms that may limit or prevent the effective use of the respirator.

Users should know that improper respirator use or maintenance may cause overexposure. They also should understand that continued use of poorly fitted and maintained respirators can cause chronic disease or death from overexposure to air contaminants.

How do you make sure the respirators fit properly?

Different types of respirators and even different brands of the same type of respirator have different fit characteristics. No one respirator will fit everyone. Some employees may be unable to get an adequate fit with certain respirator models of a particular type of respirator. This is why employers must provide a sufficient number of respirator models and sizes to ensure that every employee can select an acceptable respirator that fits properly.

Corrective eyeglasses worn by employees also present a problem when fitting respirators. Special mountings are available to hold corrective lenses inside full facepieces. A qualified individual must fit the facepiece and lenses to provide good vision, comfort, and proper sealing.

Tight-fitting respirators cannot provide proper protection without a tight seal between the facepiece and the wearer's face. Consequently, beards and other facial hair, the absence of normally worn dentures, facial deformities, or jewelry or head gear that projects under the facepiece seal can also seriously affect the fit of a facepiece. To ensure proper respiratory protection, check the facepiece each time you wear the respirator. You can do this by performing either a positive-pressure or negative-pressure user seal check. Detailed instructions for performing these user seal checks are in Appendix B-1 of the OSHA respiratory protection standard.

Fit testing is required for tight-fitting facepiece respirators. You can test the effectiveness of the fit of the facepiece two ways:

qualitatively and quantitatively.

Qualitative fit testing involves the introduction of a harmless odoriferous or irritating substance into the breathing zone around the respirator being worn. If no odor or irritation is detected by the wearer, this indicates a proper fit.

Quantitative fit testing offers more accurate, detailed information on respirator fit. While the wearer performs exercises that could induce facepiece leakage, a fit testing instrument numerically measures the amount of leakage into the respirator. This testing can be done either by generating a test aerosol as a test atmosphere, using ambient aerosol as a test agent, or using controlled negative pressure to measure any leakage. Detailed instructions for performing qualitative and quantitative fit testing is contained in Appendix A of the OSHA respiratory protection standard.

How do you inspect and take care of respirators?

It is important to inspect all respirators for wear and tear before and after each use, giving special attention to rubber or plastic parts that can deteriorate or lose pliability. The facepiece, headband, valves, connecting tube, fittings, and cartridges, canisters or filters must be in good condition. A respirator inspection must include checking the tightness of the connections.

Users must inspect SCBAs at least monthly and ensure that air and oxygen cylinders are fully charged according to the manufacturer's instructions. The inspection should include a check of regulator and warning devices to ensure their proper function. Employers must keep records of inspection dates and findings.

Users should replace chemical cartridges and gas mask canisters as necessary to provide complete protection, following the manufacturer's recommendations. In addition, they should replace mechanical filters as necessary to avoid high resistance to breathing.

Only an experienced person is permitted to make repairs, using parts specifically designed for the respirator. This person must consult the manufacturer's instructions for any repair and no attempt should be made to repair or replace components or make adjustments or repairs beyond the manufacturer's recommendations.

The employer must ensure that respirators are cleaned and disinfected as often as necessary to keep them sanitary. In addition, the employer must ensure that emergency-use respirators are cleaned and disinfected immediately after each use.

Respirators should be washed in a detergent solution and then disinfected by immersing them in a sanitizing solution. Cleaner-sanitizers that effectively clean the respirator and contain a bactericidal agent are available commercially. The bactericidal agent frequently used is a quaternary ammonium compound. Strong cleaning and sanitizing agents and many solvents can damage rubber or plastic respirator parts. Use these materials with caution or after consultation with the respirator manufacturer.

Users must store respirators in a way that protects them against dust, sunlight, heat, extreme cold, excessive moisture, and damaging chemicals. When packed or stored, each respirator should be positioned to retain its natural configuration. Facepieces and exhalation valves should rest in a normal position to prevent the rubber or plastic from deforming.

Do you need to do medical evaluations?

Workers assigned to tasks that require respirator use must be physically able to perform the work while using the respirator. The local physician or licensed health care professional (LHCP) will determine what health and physical conditions are pertinent.

The medical evaluation can be performed by a physician or other LHCP by using a medical questionnaire or by a medical examination that provides the same information as the questionnaire provided in Appendix C of the OSHA standard. This evaluation must be done before the employee is fit tested and uses the respirator in the workplace. The employer must obtain a written recommendation from the LHCP for each employee's ability to wear a respirator. Additional medical evaluations must be provided whenever health-care professionals deem them appropriate.

How do you monitor work areas?

Employers must maintain surveillance of the work area conditions and the degree of worker exposure or stress - a combination

of work rate, environmental conditions, and physiological burdens of wearing a respirator. Changes in operating procedures, temperature, air movement, humidity, and work practices may influence the concentration of a substance in the work area atmosphere. Employers must periodically monitor these factors as they affect air contaminant concentrations. In instances where work is of such short duration that it takes longer to do the test than the job, reasonable estimates of exposure are allowable.

In situations where the environment is or may be immediately dangerous to life or health, employers must ensure that one or more employees are located outside the dangerous environment. These employees must maintain visual, voice, or signal line communication with employees in the IDLH atmosphere.

In interior structural firefighting situations, employers must ensure that at least two employees enter the structure and remain in visual or voice contact with one another at all times. Also, at least two employees must be located outside the fire area to provide effective emergency rescue. All workers engaged in interior structural firefighting must use SCBA.

What equipment and air quality standards apply?

Respiratory protective devices must be approved by NIOSH for the contaminant or situation to which the employee is exposed.

Compressed air, compressed oxygen, liquid air, and liquid oxygen used for respiration must be of high purity. Oxygen must meet the requirements of the United States Pharmacopoeia for medical or breathable oxygen. Breathing air must meet at least the requirement for Grade D breathing air described in Compressed Gas Association (CGA) Commodity Specification G-7.1-1989. Compressed oxygen must not be used in open circuit SCBAs or SARs that have previously used compressed air. Oxygen concentrations greater than

23.5 percent must not be used with airline respirators unless the equipment is designed for oxygen service.

Employers must supply breathing air to respirators from cylinders or air compressors. For testing cylinders, see "Shipping Container Specifications of the Department of Transportation," *49 CFR* Part 178.

Employers must mark containers of breathing gas clearly and in accordance with NIOSH requirements, as described in *42 CFR* Part 84. Further details on the sources of compressed air and its safe use can be found in the CGA pamphlet G-7.1-1989.

The compressor for supplying air must have the necessary safety devices and alarms. Compressors must be constructed and situated to prevent contaminated air from entering the air supply system and be equipped with suitable in-line, air-purifying sorbent beds and filters installed to ensure breathing air quality. If using an oil-lubricated compressor, ensure that it has a high-temperature or carbon monoxide alarm or both. If using only the high-temperature alarm, the employer must test the air from the compressor frequently for carbon monoxide.

Air-line couplings must be incompatible with outlets for other gas systems to prevent accidental servicing of air-line respirators with non-breathable gases or oxygen.

Machinery Operation:

Machine accidents are one of the leading causes of occupational injuries. Improperly trained or careless operators often are the victims of machine accidents. Therefore, employees will not be allowed to operate any machines until they have been trained and authorized by their supervisor. Powered industrial vehicles brought on site by the Service Provider will be of the type approved for use in the "class" hazardous location in which they operate and used within their approved lifting limits. Operators of these vehicles must be properly trained and authorized by the Service Provider. The number of internal combustion engines used in any area of a building/confined area will be kept to a minimum to prevent the build-up of carbon monoxide. No internal combustion engines will be used in a confined area unless proper ventilation is provided.
Riding in the bucket of a front-end loader, or riding on any equipment where passenger seats have not been designed and provided, is prohibited.

The following procedures should be followed when operating machinery:

- Complete a machine safety check before you turn on the machine.

- Ensure that the guards and safety devices are in place and properly adjusted. Never tie down, block or defeat a safety device. Safety features such as two-hand controls are necessary to protect you. Never remove a machine guard.
- Check that everybody is clear and that the controls are in good operating condition.
- Never walk off and leave a machine running.
- Keep your machine clean.
- Turn the machine power off, lock it out and tag it before making any adjustments or repairs.
- Always relieve hydraulic or stored air pressure from lines before repairing any machine.
- Block any raised or spring loaded parts to prevent them from falling and injuring you or someone else.

Motor Vehicles:

Service Provider vehicles will be parked only in areas designated by USSI Global's Customers' site contact.

- All drivers must have a valid driver's license.
- Motor vehicles should be maintained in sound operating conditions. No operator is permitted or required to drive a vehicle known to be unsafe.
- A vehicle should not be driven when the alertness of the operator is impaired by fatigue, illness, alcohol, drugs, or is otherwise incapacitated.
- Motor vehicle operators are expected to practice "courtesy of the road" manners at all times towards other drivers and pedestrians.
- Seat belts must be worn at all times inside Company-owned or leased motor vehicles.
- If you are an operator of a company-owned or leased motor vehicle, you are responsible for the safe operation of the vehicle while it is assigned to you. You are also responsible for your safety, the safety of all passengers and cargo while you are in control of the vehicle.

Office Safety:

Falls are the most common office accident, accounting for the greatest number of disabling injuries. The disabling injury rate of falls among office workers is 2 to 2.5 times higher than the rate for non-office employees. Fall hazards are preventable and the following checklist can help stop a fall before it happens.

- Be sure the pathway is clear before you walk.
- Close drawers completely after every use.
- Avoid excessive bending, twisting, and leaning backward while seated.
- Secure electrical cords and wires away from walkways.
- Always use a stepladder for overhead reaching.
- Chairs or boxes should never be used as ladders.
- Clean up spills immediately.
- Pick up objects co-workers may have left on the floor.
- Report loose carpeting or damaged flooring.
- Never carry anything that obscures your vision.
- Wear stable shoes with non-slip soles.

If you find yourself heading for a fall, remember to roll and don't reach. By letting your body crumple and roll, you are more likely to absorb the impact and momentum of a fall without injury. Reaching an arm or leg out to break your fall may result in a broken limb instead.

Strains and Overexertion are also common office accidents. Although a typical office job may not involve lifting large or especially heavy objects, it is important to follow the principles of safe lifting. Small, light loads (i.e., stacks of files, boxes of computer paper, books) can hurt your back, neck, and shoulders if you use your body incorrectly when you lift them. Backs are especially vulnerable; most back injuries result from improper lifting. Before you pick up a carton or load, ask yourself these questions:

Is this too heavy for me to lift and carry alone?
How high do I have to lift it?
How far do I have to carry it?

Am I trying to impress anyone by lifting this?

If you feel that the lift is beyond your ability, contact your supervisor or ask another employee to assist you. Follow Safe Lifting Steps including:

Take a balanced stance with feet placed shoulder-width apart. When lifting something from the floor, squat close to the load.
Keep your back in its neutral or straight position.
Grip the object with your whole hand, rather than only with your fingers.
Lift by straightening your legs. Let your leg muscles, not your back muscles, do the work.
Never twist when lifting. When you must turn with a load, turn your whole body, feet first.
To set something down, use the same body mechanics designed for lifting.
Bending from a seated position and coming back up places tremendous strain on your back. Also, your chair could be unstable and slip out from under you. Instead, stand and move your chair out of the way. Squat and stand whenever you have to retrieve something from the floor.

Smoking Policy:

Smoking, in general, is not permitted at USSI Global's Customer facilities except at authorized locations. At some locations, no smoking is allowed on site. In areas of renovation or new construction, smoking is always prohibited.

SUBSTANCE ABUSE:

The Service Provider shall develop, administer and enforce a policy promoting a drug free workplace. While on USSI Global's Customers' property, abide by USSI Global's substance abuse policy that states: The use, sale, manufacture, possession, distribution, or unauthorized presence in the body of illicit drugs or controlled substances is prohibited. The possession, sale, offer for sale, consumption or being under the influence of intoxicating beverages is prohibited. Violations could be grounds for termination of contract.

Drug and Alcohol Policy

USSI Global is firmly committed to providing a safe, healthy, productive and efficient work environment for our worksite employees. We have a vital interest in preventing accidents and injuries resulting from the misuse of alcohol or drugs. The unlawful or improper presence or use of drugs or alcohol in the workplace presents a danger to everyone. While on USSI Global's premises (including company vehicles) and while conducting business-related activities off premises, you may not use, possess, distribute, sell, or be under the influence of alcohol or illegal drugs. The legal use of prescribed drugs is permitted on the job only if it does not impair your ability to perform the essential functions of the job effectively and in a safe manner that does not endanger yourself or other individuals in the workplace. The prohibition against consuming alcohol during the workday does not include the authorized and reasonable consumption of alcohol by an employee of legal drinking age at functions or activities sponsored by USSI Global. An employee's illegal conduct involving drugs or alcohol during non-working times may also result in discipline, up to and including discharge. Under the Drug Free Workplace Act, an employee who performs work for a government contract or grant must notify his or her Worksite Employer of a criminal conviction for drug-related activity occurring in the workplace. The report must be made within five days of the conviction.

If USSI Global has a Drug Free Workplace Program, or if you are in a position requiring drug or alcohol testing under state or federal law, you will be subject to drug and alcohol testing. Violations of this policy will subject an employee to discipline, including suspension or termination of employment and/or required participation in a substance abuse program. Such violations may also have legal consequences.

Unannounced inspections for the presence of illegal drugs or unauthorized alcohol in USSI Globals' facilities and property such as but not limited to vehicles, desks, file cabinets and lockers may be conducted where there is reasonable suspicion to believe an employee may have or has violated this policy. Further, personal inspections of an employee and their personal property such as but not limited to vehicles, clothing, packages, purses, brief cases, lunch boxes, or other containers may be conducted where there is reasonable suspicion to believe that the employee has violated this policy.

Employees with questions or concerns about substance dependency or abuse are encouraged to use the resources of the

Employee Assistance Program Referral: Florida Drug Screening, Inc. at 321-728-2941. Employees may also wish to discuss these matters with their supervisor or a USSI Global Human Resources Professional to receive assistance or referrals to appropriate resources in the community.

DRUG FREE WORKPLACE PROGRAM MONITORING
To measure the success of, and to aid in enforcing our Drug Free Workplace Program, the following types of drug screening tests will be administered to detect the presence of illegal drugs.

Job applicants, as a condition of obtaining employment.
Employees who are required to undergo FITNESS FOR DUTY MEDICAL EXAMINATIONS. Employees as a FOLLOW-UP return from rehabilitation program. These employees will be tested upon return to duty and periodically for up to two years.
Employees who, by reliable evidence, or by their observed or reliably reported behavior, may be REASONABLY SUSPECTED of: (a) Using or being under the influence of drugs, alcohol or medications while working. (b) Tampering with a drug screen test. (c) Involved in, causing or contributing to an accident involving a reportable injury (i.e. an injury sufficient to require the attention of a medical professional), lost time and/or property damage sufficient to delay or halt work. All specimens must be provided by the employees as soon as possible but not later than 32 hours after the accident.

Under an annual testing schedule, 4 members of the workforce will be selected quarterly for random testing. Employees can also be tested upon customer request for site access to customer property.

Notice of Drug Testing will be given on all vacancy announcements. In addition to testing illegal drugs, a test for the presence of alcohol may be administered. In addition, a blood specimen will be provided for the alcohol test. A Florida AHCA licensed laboratory must perform the blood test for alcohol. A copy of documentation supporting a REASONABLE SUSPICION drug and alcohol test will be completed within seven (7) days after testing, will be provided to the employee upon request, and will be retained confidentially by the company for at least one (1) year.

Testing for the presence of drugs and alcohol will be performed by an AHCA approved laboratory after obtaining urine specimens for drug tests and blood samples for alcohol tests. Alcohol may be tested for under Reasonable Suspicion and Post Accident testing situations. All positive specimens from the initial screening are then tested a second time using a different technique and chemical principal from the initial test to insure reliability and accuracy. All test results are reported to the Medical Review Officer (MRO) for verification prior to being transmitted to the employee and/or employer.

CONSEQUENCES TO EMPLOYEES OF:

1) POSITIVE CONFIRMED DRUG OR ALCOHOL TESTS
2) REFUSAL TO BE TESTED FOR DRUGS OR ALCOHOL WHICH INCLUDES ADULTERATION OR SUBSTITUTION OF THE SPECIMEN TO BE TESTED.
3) ANY PLEA OF GUILTY OR NOLO CONTENDERE TO ANY VIOLATION OF CHAPTER 893 OR OF ANY CONTROLLED SUBSTANCE LAW OF THE UNITED STATES OR ANY STATE, FOR A VIOLATION OCCURRING IN THE WORKPLACE.
4) CONSUMPTION OF ALCOHOL OR INTOXICATION ON COMPANY TIME.

a. Job Applicants will not be hired.

b. Employees being tested in conjunction with a physical examination, as a follow-up to rehabilitation, as a result of reasonable suspicion, a random test or because of contributing to or causing an accident (no injury involved) will be terminated. Injured employees will also forfeit eligibility for workers' compensation medical payments and indemnity payments.

c. Employees arrested, indicted or convicted of violating controlled substance laws will notify the employer within five (5) days of the event and if this substance abuse policy was also violated, will be disciplined up to and including termination, depending on the circumstances.

d. In the event under this policy an employee is required to seek an assistance program, it may be at the employee's expense and the employee must provide documentation of the assistance program. Follow up testing may be required,

and if so it must be conducted at least once a year for a 2-year period after completion of the program. A positive confirmed test during or after referral to an assistance program will result in termination of employment.

CHALLENGES TO CONFIRMED POSITIVE TEST RESULTS
The employee should retain any information he/she considers relevant to the drug test for review by the Medical Review Officer.

CONFIDENTIALITY OF DRUG TESTING INFORMATION
All written reports and related information received by the company, laboratories, employee leasing programs, drug and alcohol rehabilitation programs and their agents will be held in strictest confidence and will not be disclosed except in accordance with Florida Statutes or otherwise legally disclosed. Release of such information under any other circumstance shall be solely pursuant to a written consent form signed voluntarily by the person tested. Information on drug test results shall not be released or used in any criminal proceeding against the employee or job applicant.

Agents of our company and the laboratory conducting a drug test will, however, have access to drug test information when consulting with legal counsel in connection with actions brought against them when the information is relevant to its defense in a civil or administrative matter.

CONFIDENTIAL REPORTING OF MEDICATION USE
The company knows that eventually most people need to take medications to combat various illnesses. Employees must realize, however, that many medications will alter or affect a drug test. An employee could possibly test positive for a drug when taking medications prescribed by a doctor or bought over the counter at a pharmacy. Medications known to alter or affect a drug test are listed above. Employees who want more technical information about medications may consult the testing laboratory. To avoid the potential problems created by a false test result, the MRO will contact the employee regarding all positive results to determine the use of medications. You may list the use of medications on the back of your copy of the chain of custody form after your specimen is collected and discuss use of medications only with the MRO. The only prescription drugs considered allowable if found in the drug tests are those used under the supervision of a doctor.

Heat Stress Prevention and Emergency Management:

Working in hot conditions can lead to heat illness, heat stroke, and sometimes death. Working under direct sunlight, high humidity, poorly ventilated areas, or wearing heavy protective clothing are all factors that raise the risk of heat illness. Access to water and shade should always be available. Be aware of the following symptoms of Heat Stress:
Nausea, headache, muscle cramps, dizziness, unusual fatigue, vomiting, rapid pulse, excessive sweating, hot dry skin, seizures, fainting or loss of consciousness.

To prevent heat illness:
– Drink 3-4 cups of water per hour to replenish fluid lost to sweat.
– Take frequent rest breaks in cool, shaded areas.
– Wear a hat to protect your head and shades your eyes.
– Avoid alcohol, caffeinated drinks and heavy meals.

If anyone experiences the symptoms above:
– Move the worker to a cool, shaded area.
– Loosen or remove heavy clothing.
-- Provide cool drinking water.
-- Call for help if needed

All USSI Global Service Providers are required to review the OSHA training for Heat Safety Training Guide for workers. OSHA document OSHA 3437-04N 2011.

ELECTRICAL SAFETY

Electrical safety involves two primary issues:

- Powerlines,
- Temporary and permanent electrical wiring and equipment.

To avoid electrical incidents, several basic safety rules must be followed:

- Stay at least 10 feet back from powerlines, in ALL directions.
- Do not store materials under powerlines.
- Mark powerlines on the job site with warning signs below.
- Use ground fault circuit interrupters (GFCI) whenever plugging into temporary power or using an extension cord.
- Extension cords and trailing cords with missing ground prongs must be removed from service.
- Extension cords and trailing cords with cuts must be removed from service.
- Do not operate wet power tools.
- Keep extension cords from being damaged in doorways or being run over.
- Keep extension cords out of wet areas.
- Never wire anything yourself or attempt to make electrical repairs. Leave that for an electrician.
- Assume all wires and electrical boxes are live, unless you are certain they are not.
- Do not store any materials within 3 feet of electrical boxes.
- Ground-fault circuit interrupters (GFCI) will be used whenever possible.
- Electric cords will be inspected daily and repaired or replaced as necessary.
- Do not operate any power tool or equipment unless you are trained in its operation.
- Use tools only for their designed purpose.

Stand Down Clause

Conduct a "Safety Stand Down" (suspend all work or any portion thereof) in accordance with the provisions of the General Conditions 00 70 00, Article G-10-04 Port's Right to Stop the Work for Contractor Non-Performance. Suspended work shall not be allowed to resume until the Contractor has completed the following actions for review and acceptance by the Engineer:

a) Hazardous conditions leading up to the Safety Stand Down shall be abated.

b) Training of such type and duration shall be conducted to educate personnel on the awareness of, identification of, and correction of hazards leading up to the stand down.

c) Document the completion of items a. and b. above.

Disciplinary Action:

DISCIPLINARY ACTION MATRIX	1ST VIOLATION	2ND VIOLATION	3RD VIOLATION	NOTES

FOCUS POINT /INCIDENT				
Service Provider	Verbal Notice	Written Notice	Removal from project	
USSI Global Field Engineer	Verbal Notice	Written Notice	2nd Written Notice	3rd Violation is taken into consideration by Executive Management

*NOTE: *There is no requirement that all steps in the discipline progression must be followed; the company has discretion to decide on the penalty depending on the nature of the offense.*
***NOTE: If the site has a disciplinary action program that is more advanced than USSI Global's discipline program, USSI Global will follow the sites discipline program.*

Safety Practices and Procedures (Unabridged) Acknowledgement

Service Providers, their personnel and USSI Global personnel involved in Customer Projects are required to review this Safety Practices and Policies document prior to completing any installation and/or service activity for the Customer.

USSI Global will, through its Field Representative, verify that Service Providers, their personnel and USSI Global personnel have reviewed and indicated their understanding of this Safety Practices and Policies document prior to completing any installation and/or service activity for the Customer by signing below.

_____	_____	_____
Owner of Service Provider Company/USSI Global Personnel	Print/Type Name and Tech Code	Date
_____	_____	_____
Additional Employee		
_____	_____	_____
Additional Employee		
_____	_____	_____
Additional Employee		
_____	_____	_____
Additional Employee		

*Add additional signature sheets if necessary

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