

Safety Practices and Procedures (Unabridged)

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 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, 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 to perform work on Customers' premises constitutes a requirement that:

The Service Providers abide by and enforce USSI Safety Practices and Procedures in addition to safety policies and practices as they apply to work on USSI'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 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 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's Field Services Coordinator advised of safety compliance by the Service Provider and will recommend termination of any contract for violations of the USSI 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.

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'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.

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 Project Manager, USSI Field Services Coordinator and USSI 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 UNTIL THE DISPATCHER DOES!

Send someone to meet and direct paramedics. Remain at the scene after emergency personnel have arrived to provide information.

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 _____



9145 Ellis Road • Melbourne, FL 32904

(800) 444-8774 • fax (321) 727-3107

www.ussi.org



Please consider the environment before printing

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 USSSI'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, USSSI 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 capacitors 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. No Customer owned equipment or tools are to be used without permission of the USSI Project Manager. Service Provider is to identify any of their employees who will use USSI'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's Customer will provide necessary information to the Service Provider, who in turn will be responsible for training its own employees.

Hand Tools

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.

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.

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 has identified the following places concerning fall protection:

- 1) 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).
- 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.

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 than 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.

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.

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.

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's Customers' employees will be required to wear equivalent protection

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 USSSI'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'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's Customers' property, abide by USSI'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.

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

Safety Practices and Procedures (Unabridged) Acknowledgement

Service Providers, their personnel and USSI 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 will, through its Field Representative, verify that Service Providers, their personnel and USSI 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.