

# UPSON COMPANY

## Employee Safety Guidelines

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## **Safety Policy**

Employees are our most important asset; their safety is our top concern. It is the intent of the Upson Company (“Company”) to provide a safe working environment, to eliminate safety hazards and to provide appropriate personal protective equipment and training so that employees may perform their tasks safely.

It is the Company’s policy to eliminate, to the extent practicable, health and safety risks to our employees by:

1. Complying with applicable federal, state and local laws;
2. Correcting unsafe conditions and/or work practices;
3. Promoting safety awareness;
4. Holding each employee accountable for working safely and complying with this Policy;
5. Requiring our employees to inform the Foreman of Safety Coordinator immediately of unsafe conditions or work practices that may create a hazard or pose a safety or health risk; and
6. Providing the training necessary to implement this Policy.

The Company will periodically review our operations to assess our progress in implementing and conforming to this Policy and our progress in complying with applicable laws and regulations.

## Scope of Safety Guidelines

These Safety Guidelines (Guidelines) provide an overview of applicable Occupational Safety and Health Administration (OSHA) standards and other safety measures that will apply to employees working at all of the Company's construction sites. While there is no substitute for reading the actual OSHA standards, this overview generally describes the work practice requirements that are expected of employees when working at the Company's construction sites. Each employee is expected to take prompt action to correct or control any recognized hazard regardless of whether such action is described in this document or in training. The Company will ensure that work practices, training, and personal protective equipment meet regulatory requirements.

## Site Specific Safety Program

Due to the differing nature of the job sites, it is the Company's policy that the Foreman and Safety Coordinator of each job site develop a specific written safety program as a supplement to the Guidelines to address the hazards specific to each job site. The two main components of the Site Specific Safety Program are: (1) the written safety program and (2) safety meetings.

### 1. Written Safety Program

The Company requires that the Foreman and Safety Coordinator of each job site assess the actual and potential hazards that may be encountered before beginning work on the project. Based on this assessment, the Foreman and Safety Coordinator will develop a site specific written safety program which, at a minimum, addresses the elements identified in the attached *Format for Written Safety Program* work sheet which outlines the safety requirements for each job (see pages 33-35). Copies will be on hand at each job sit for employees to review via the Foreman or at the job site office. The Safety Supervisor with the Safety Coordinator's assistance will provide training so that employees understand the hazards, protective measures and work practices to perform their assigned tasks safely.

### 2. Safety Meetings

The Safety Coordinator will conduct a safety meeting at the beginning of each project for employee training and will hold weekly meetings as needed. The Company encourages employees to ask questions. The meetings are intended to cover current safety concerns and provide reminders of safe work practices. The Safety Coordinator may not cover every safety issue related to the job in these meetings. This does not excuse, however, the employee from discipline associated with unsafe work practices. All employees must follow the safety measures described in the Guidelines and those that are specific to each job site.

The Safety Coordinator will introduce safety issues and practices to new employees on a weekly basis. The Safety Coordinator will provide the pre-job safety program information and training on the first day of work for those employees who are not present for the initial safety orientation at the start of each project.

The Safety Coordinators will meet with the Safety Director every three weeks to discuss new “tool box” safety items or to review old issues. These “tool box” items will then be conveyed to the employees at the safety meetings.

## **Safety Violations**

1. Employees who deviate from safety rules and regulations and do not conform to the Guidelines may be subject to immediate termination. (See Employee Handbook section on Disciplinary Action.)
2. Foremen will receive a written probation for failure to hold proper safety meetings at the start of a project.
3. The Occupational Safety and Health Act, 29 USC §§ 651 et seq. prescribes penalties to employers who fail to comply with the statute and/or safety standards. Depending on the nature of the violation, penalties can be assessed for up to \$70,000.

## Accident Report Policy

All near-miss, property damage, and injuries (other than minor first aid) must be reported immediately to the Foreman and an accident investigation and report form must be completed. All Foremen shall have a Supervisor's Accident Investigation & Report ("Report") form at each job site. Foremen will investigate all near-miss, property damage, and injury situations immediately. The investigation shall be prompt, thorough, and objective. The Report cover provides the investigative procedures. All injuries requiring any medical attention must be forwarded to the Company office immediately following the accident.

1. The injured employee, if capable, along with the Foreman must fill out the Report form *immediately* following each incident. Filling out the Report "after the fact" may result in discipline of the injured employee, as it is the injured employee's responsibility to ensure that the Report is accurately completed.
2. Any accident must be recorded on the injured employee's time card on the date of the injury by the employee.
3. After treatment, the injured employee must bring a copy of the completed Report form to the office and fill out a Notice of Injury and Claim for Benefits form. A medical examination performed by a physician selected from Primary Health must be recorded in the Company office within five (5) working days following the incident. The processing of both forms is the responsibility of the injured employee.
4. Injury reports must provide the following information: (1) the age of the injured employee; (2) social security number; (3) job location; (4) date and time of injury; (5) tool or machine (if any) involved; (6) how the incident occurred; and (7) injury.
5. The injured employee will not be allowed to return to work until a doctor has furnished our office with written notification saying that the injured employee can return to work.
6. The Company must provide oral notification to OSHA within 8 hours of any work related fatality of any employee or the work related in-patient hospitalization of three or more employees.

*\*In Oregon, the Company must notify Oregon OSHA of all fatalities or catastrophes within 8 hours of the occurrence. A catastrophe means an accident in which two or more employees are fatally injured, or three or more employees are admitted to a hospital or an equivalent medical facility. The Company must also notify Oregon OSHA of accidents or injuries resulting in a hospital admission*

*with medical treatment other than first aid within 24 hours after the employer receives notification.*

## **First Aid**

1. Prior to commencement of each project, the Foreman will ensure the availability of the prompt medical attention in case of serious injury.
2. The Foreman of each job site is trained in medical first aid.
3. Each job site has a first-aid supply kit contained in a weatherproof container with individual sealed packages for each type of item.
4. Each job site will either provide the proper equipment for prompt transportation of an injured person to a physician or hospital or a communication system for contacting necessary ambulance services.
5. The telephone numbers of the physicians, hospitals or ambulances will be posted in conspicuous areas at each job site (i.e., job site office).

## **Fire Protection and Prevention/ Emergency Action Plan**

### **Developing a Fire Protection and Prevention/ Emergency Action Plan**

Each Foreman is responsible for developing a Fire Protection and Prevention Plan/ Emergency Action Plan (Plan) specific to each job site. At a minimum, the Plan must include:

1. Escape procedures and emergency escape route assignments (the Foreman must develop a pre-plan exit for leaving the roof);
2. Procedures to account for all employees after evacuation is complete (location of a mustering area);
3. Rescue and medical duties for employees who are to perform them;
4. The preferred means for reporting fires and other emergencies (i.e. 911);
5. Names and job titles of persons who can be contacted for further information under the plan(s);

The Plan must also designate an individual to stand watch for at least one hour at the end of the work day after the last torch is shut down.

The Foreman and/or the Safety Coordinator will review the Plan with the employees when: (1) the Plan is initially developed; (2) employee responsibilities under the Plan change; and (3) whenever the Plan is changed.

### **Fire Extinguishers**

Each Foreman will ensure that fire extinguishers are present in each working area. The fire extinguishers must be rated no less than 2A. The travel distance from any point of the protected area to the nearest fire extinguisher shall no exceed 100 feet. The Foreman or Safety Coordinator will inspect each fire extinguisher monthly to ensure its integrity.

If a fire cannot be extinguished immediately, the Foreman will call 911 and evacuate the area in accordance with the Plan.

## **Hazard Communication Program**

### **General**

The purpose of the Hazard Communication Program (Program) is to ensure that employees understand the hazards associated with the chemicals that they may encounter in the workplace and learn how to protect themselves from these hazards. This Program complies with the Occupational Safety and Health Administration (OSHA) Hazard Communication Standard (HCS) set forth at 29 CFR § 1926.59.

This Program provides information on the substantive provisions of the HCS, including labeling, Material Safety Data Sheets (MSDS) and employee training.

### **Program Coordinator**

Randy Upson is the Program Coordinator and is responsible for ensuring the Program's implementation. A copy of this Program and the HCS can be obtained from the Upson office or on each job site.

### **List of Hazardous Chemicals**

The Company maintains a comprehensive list of the hazardous chemicals used on each job site and updates the list periodically. A current list of hazardous chemicals is located in the Upson office. Each job site maintains a site specific chemical list and can be obtained from the Foreman. The hazardous chemical list is updated when receiving new hazardous chemicals on the job site and as chemicals are retired from use.

### **Material Safety Data Sheets (MSDS)**

The Company maintains a file compiling the MSDSs of the chemicals used on the job sites. The MSDS file is located at the Upson office and is accessible to employees at all times. The Foreman of each job site maintains the MSDSs for the site specific chemicals and are accessible to employees at all times. The MSDSs contain the following information for each chemical:

1. Identity as used on the label;
2. Physical and chemical characteristics;
3. Physical hazards;
4. Health hazards;

5. Primary route of entry;
6. Permissible exposure limits;
7. Whether listed in the National Toxicology Program Annual Report on Carcinogens, the International Agency for Research on Cancer or by OSHA;
8. Applicable safe handling precautions;
9. Control measures;
10. Emergency and first aid procedures;
11. Date of MSDS preparation; and
12. Name, address and phone number of chemical manufacturer.

MSDSs or other documentation containing MSDS equivalent information are retained for thirty (30) years. The Company is responsible for acquiring and updating MSDSs, for verifying their completeness and providing the necessary copies to each job site. Employees may not use chemicals on the job site without prior approval. MSDSs meeting the HCS requirements must be complete and accessible at the job site either prior to or at the time of receipt of the first shipment of any potentially hazardous chemical. If the MSDS for a particular chemical is not present, the chemical will not be used until the appropriate MSDS is obtained.

### **Labels and Other Forms of Warning**

The Company will ensure that all hazardous chemicals on the job site are properly labeled. Labels contain the following information: (1) the chemical identity, (2) appropriate hazard warnings, and (3) the name and address of the manufacturer, importer or other responsible party.

The Company will ensure that the label's information is consistent with the corresponding MSDS. If materials are transferred into a secondary container for use and storage, the secondary container must be labeled with the same information as on the original container. Secondary containers for use on that shift only by the employee drawing the material do not require labeling. However, if the secondary container is brought back for storage, it must be labeled with the same information as the original container. Secondary labels can be obtained from the Safety Director. Labels will be inspected on a regular basis and any labels that are illegible, missing, or damaged will be replaced. If an employee discovers a container that is not labeled, the chemical may

not be used until the contents are verified. Notify the Program Coordinator of any unlabeled containers.

## **Training and Information**

Each employee who works with or is potentially exposed to hazardous chemicals will receive initial HCS training on the safe use of those hazardous chemicals. Additional training will be provided for employees whenever a new hazard is introduced into the workplace or when an employee is reassigned to a new area which involves work with or potential exposure to hazardous chemicals for which the employee has not previously received hazard communication training.

Hazardous chemical training is provided by the Safety Director and/or the Safety Coordinator and includes:

1. Summary of the HCS and where a copy of the standard is located.
2. Details of the Program and where a copy is located.
3. Location of the Hazardous Chemical Inventory.
4. Hazardous chemical properties, including visual appearance, odor and other methods and observations to detect the presence or release of hazardous chemicals.
5. Physical and health hazards associated with potential exposure to workplace chemicals.
6. Procedures and measures to protect against hazards (i.e. personal protective equipment, work practices and emergency procedures).
7. Hazardous chemical emergency procedures.
8. Where MSDSs are located, how to understand their contents, how employees may obtain and use the MSDS information and where to obtain additional information, if necessary.
9. How to read labels and MSDSs to obtain appropriate information.

Training on the hazards associated with chemicals specific to each job site will be provided by the Foreman upon initial assignment. Training will also be provided when a new physical or health hazard is introduced into the work area.

A record of each training session, the materials covered, the names of employees attending, the date of training and the name of the trainer will be maintained on the job site and a copy forwarded to the Company office.

### **Other Job Site Employers**

The Company will advise other employers on the job site of any chemical hazards which may be encountered in the normal course of their work on the job, the location of the MSDSs, the labeling system used by the Company and any PPE or precautionary measures that should be taken when working with those chemicals.

Prior to commencing work, the Company will ascertain the following: (1) the chemical hazards created by other contractors which may be encountered by the Company's employees; (2) where the MSDSs are located; (3) the labeling system used; and (4) appropriate personal protective equipment and other protective measures. The Company will provide training and the information necessary for its employees to protect themselves from the hazards associated with these chemicals.

### **Hazardous Non-Routine Tasks**

Periodically, employees are required to perform hazardous non-routine tasks such as confined space entry. Prior to starting work on such projects, each affected employee will be provided information and training, if needed, by the Foreman about the chemicals and other hazards that may be encountered during such activity. This information will include specific chemical hazards, protective clothing and equipment, and safety measures the employee can use, along with steps the Company uses to minimize the hazards, including ventilation, respirators, presence of another employee and emergency procedures.

### **Additional Information**

Further information on this Program, the HCS and the applicable MSDSs may be obtained from the Foreman or Randy Upson.

## Clean-Up and Housekeeping

A neat and orderly work area makes for a more pleasant, as well as a safer place to work. All employees are expected to keep their work stations, offices and surrounding areas clean and presentable in deference to fellow employees and clients who may visit the office or job site.

### 1. General

- a. General waste, scraps, debris and rubbish must be cleared daily from work area, passageways and stairs, in and around buildings and other structures.
- b. All stairways, gangways and access ways must be kept free of materials, supplies and other obstructions.
- c. Tools, material, extension cords, hoses and/or debris must not be left about the site in order to prevent tripping or other hazards.
- d. Oil, grease, or other hazardous materials must not be allowed to accumulate so as to prevent slipping or fire hazards.

### 2. Storage

- a. Materials must be stored in safe neat piles for easy access and to prevent from collapse or falling and to prevent hazards to other workers.
- b. Oil, grease and other hazardous materials or liquids must be stored in leak-proof, locked containers in an area that is protected from the elements (covered building), away from storm drains, sewers and waterways.

### 3. Disposal

- a. Metal or approved containers will be provided for waste and rubbish disposal.
- b. Separate containers will be provided for materials destined for recycling (i.e., sheet metal, metal scraps) and will be labeled accordingly.
- c. Garbage and chemical wastes such as caustics and toxic materials will be stored in approved covered containers and labeled as to their contents.
- d. Combustible scrap, debris and garbage must be frequently removed.
- e. Employees shall not throw or drop materials from upper levels to the ground unless disposal is provided and the area below is barricaded or secured.

### 3. Securing Materials

- a. At the end of each working day, secure materials from the elements and theft with tarps, ropes, or wire.
- b. When the wind is blowing, secure materials to prevent them from becoming airborne and causing damage to the property of others.
- c. When transporting materials from one destination to another, secure materials.

## Ladders

1. General
  - a. Except where permanent stairways, temporary stairways, ramps or runways are provided, ladders must be provided for safe access to all elevations.
  - b. OSHA standard 29 CFR § 1926.1053 that prescribes requirements for ladders.
  - c. Manufactured ladders must conform to applicable safety codes.
2. Situations Where the Use of Ladders is Required
  - a. A ladder is required at all access points where there is a break in elevation of nineteen inches (19") or more.
  - b. If a ladder provides the only means of access or exit from a working area for twenty-five (25) or more employees, if simultaneous two-way traffic is expected, a double cleat ladder should be installed.
3. General Requirements for Ladder Use
  - a. Two or more ladders used to reach an elevated work area must be separated by a platform or landing.
  - b. The side rails, cleats or rungs of ladders must be kept clear and free of lines, hoses, cables, wires, oil, grease and debris.
  - c. Ladders must be blocked, tied or otherwise secured to prevent accidental displacement.
  - d. The areas around the top and bottom of a ladder must be clear.
  - e. Both rails of a non-self-supporting ladder must be equally placed against the top support (unless equipped with a single support attachment).
  - f. Ladders may not be used in a horizontal position as platforms, runways, scaffolds or as support for other materials.
  - g. Ladders shall not be placed in passageways, doorways, driveways or in any location where they may be displaced by other work activities, unless protected by barricades or guards.
  - h. Always face a ladder when ascending or descending.
  - i. Material must be raised or lowered with a line or hoisting equipment and not carried in one hand during ascent or descent.
  - j. Ladders shall be of sufficient length to extend at least three feet (36") above the top landing.
  - k. Portable ladders used on smooth surfaces must have non-slipping bases or other means to prevent displacement.

- l. When working from a ladder, one hand should be free at all times to allow a firm grip on the ladder.
- m. Portable ladders should be placed so that the horizontal distance from the foot of the ladder to the top support is approximately  $\frac{1}{4}$  of the working length of the ladder.

*\*In Oregon, extension ladders must be equipped with necessary guide irons, locks, and hooks must be assembled so that the sliding (upper) section is on top of the base (lower) section.*

#### 4. General Prohibitions on Ladder Use

- a. The fastening together of ladders to provide longer sections is prohibited (unless the ladders are specifically designed for such use).
- b. Ladders must not be loaded beyond maximum load capacity.
- c. Ladders must not be placed on unstable or unlevel surfaces (unless secured).
- d. Do not move, shift or extend a ladder when occupied.
- e. The use of portable, metal ladders should be restricted to areas which do not pose electrical hazards.
- f. Do not use a single-rail ladder.

#### 5. Step Ladders

- a. Ensure that a metal spreader or locking device holds the front and back sections in an open position.
- b. The top step may not be used as step.
- c. Do not climb on the rear section.

#### 6. Inspection and Maintenance of Ladders

- a. Inspect ladders periodically for visible defects. Ladders with broken or missing rungs and steps, broken or split side rails or other faulty and defective parts may not be used.
- b. Clearly mark a ladder with structural defects as defective (for example, "DO NOT USE") and withdraw it from service until repaired.
- c. Restore the defective ladder to its original condition before returning it to use.

#### 7. Employee Training Requirements

- a. Employees shall be trained in the following areas:
  - (i) the nature of fall hazards;

- (ii) the procedures for erecting, maintaining and disassembling fall protection systems to be used;
  - (iii) the proper methods to construct, use, place and care for ladders;
  - (iv) the maximum load-capacities of ladders used; and
  - (v) the requirements or prohibitions set forth in the OSHA standard.
- b. Retraining shall be provided as necessary.

## Scaffolding

### 1. General Requirements for Scaffold Use

- a. Scaffolds must be provided for employees engaged in work that cannot be done safely from the ground or from solid construction.
- b. Scaffolds may not be used to store material except material being currently used.
- c. Each scaffold platform and walkway must be at least eighteen inches (18") wide.
- d. The front edge of the platform cannot be more than fourteen inches (14") from the face of work, unless guardrail systems are erected and/or personal fall arrest systems are used.
- e. Supported scaffolds with a height to base width ratio of more than four to one (4:1) must be restrained from tipping by tying, bracing or other equivalent means.
- f. Scaffolding must have side and end rails.
- g. Supported scaffold poles, legs, posts, frames and uprights must bear on base plates or other adequate foundation and be plumb and braced to prevent swaying.
- h. A *competent person*<sup>1</sup> must inspect the scaffold for visible defects before each shift and after any event which could effect its integrity. All scaffolds must be maintained in safe condition and scaffolds damaged or weakened from any cause shall be immediately repaired and shall not be used until repairs have been completed.
- i. Clearance between scaffolds and power lines must be in accordance with 29 CFR § 1926.451(f)(6).
- j. Ladders may only be used to extend working height level if criteria set forth at 29 CFR § 1926.451(f)(16) are satisfied.
- k. Each employee on a scaffold more than ten feet (10') above a lower level must use fall protection.

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<sup>1</sup>A competent person means one who is capable of identifying existing and predictable hazards under the existing work conditions which are dangerous to employees and who has authorization to take prompt corrective measures to eliminate them.

- I. Scaffolds must be cleared of all tools, loose material and debris at the end of each working day.
- m. Employees may not work on scaffolds during storms and high winds.

## 2. General Prohibitions

- a. All scaffolds must be designed to carry four (4) times the maximum intended load. At no time shall any scaffold be overloaded.
- b. Scaffolds may not be moved horizontally when employees are on them.
- c. Employees may not work on scaffold covered with ice, snow or other slippery material except for removal of such materials.
- d. Do not use boxes, barrels or other props to increase working height level.
- e. Lean-to scaffolds and makeshift platforms are prohibited.

## 3. Specific Requirements of Tube and Coupler Scaffolds

- a. When platforms are moved to the next level, the existing platform must be left undisturbed until the new bearers have been set in place and braced.
- b. Transverse bracing forming an "X" across the width of the scaffold must be installed at the scaffold ends and at least at every third set of posts horizontally and every fourth runner vertically. Bracing must extend diagonally from the inner or outer posts or runners upward to the next inner posts or runners.
- c. Straight run scaffolds, scaffolds whose length is greater than its height, and scaffolds whose length is less than its height must be braced in accordance with 29 CFR § 1926.452(b)(3).
- d. If conditions preclude the attachment of bracers to posts, bracing must be attached to the runners as close the post as possible.
- e. Bearers must be installed transversely between posts, and when coupled to the posts, must have the inboard coupler bear directly on the runner coupler. When the bearers are coupled to the runners, the couplers must be as close to the posts as possible.
- f. Bearers must extend beyond the posts and runners, and shall provide full contact with the coupler.
- g. Runners must be installed along the length of the scaffold, located on both the inside and outside posts at level heights.
- h. Runners must be interlocked on straight runs and must be coupled to each post. The bottom runners and bearers must be located as close to the base as possible.
- i. Couplers must be of a structural metal, such as drop-forged steel,

- j. malleable iron, or structural grade aluminum. Gray cast iron is prohibited. Tube and coupler scaffolds over 125 feet in height must be designed by a registered professional engineer.
- k. See 29 CFR § 1926.452 for additional requirements.

## Fall Protection

### 1. General Requirements

- a. Fall Protection (guardrail, safety net, or personal fall arrest system) must be used when an employee is working or walking in or on:
  - (i) An unprotected side or edge six feet (6') or more above a lower level;
  - (ii) Constructing a leading edge six feet (6') or more above lower levels;
  - (iii) Walking/working surface six feet (6') or more above a lower level where leading edges are being constructed, but the employee is not involved in the leading edge working;
  - (iv) A hoist area six feet (6') or more above a lower level; and
  - (v) Walking/working surfaces with holes more than six feet (6') above lower levels.

*\*In Oregon, when performing residential type construction work, such as leading edge work, top plate work, constructing and setting walls and trusses, or doing roofing and sheathing work, the fall distance to a lower level may be increased from 6 feet (6') to 10 feet (10').*

- b. Safety harness, lanyards and lifelines and other fall arrest system components may only be used for safe-guarding employees and for no other purposes.
- c. Inspect all fall arrest system components before each use for wear, damage and deterioration. Remove from service if found defective.

### 2. Work on Low-Slope Roofs (equal or less than 4 in 12)

- a. Fall protection in one of the following forms must be used when working on low-slope roofs with unprotected sides and edges six feet (6') or more above lower levels: (1) a guardrail system; (2) a safety net system; or (3) a personal fall arrest system; or a combination of: (4) warning line system and guardrail system; (5) warning line system and safety net system; (6) warning line system and personal fall arrest system; or (7) warning line system and safety monitoring system.
- b. Warning line system must be erected around all sides of the roof work area and not less than six feet (6') from the roof edge:
  - (i) Mark every six feet (6') with survey tape;

- (ii) Ensure that the line is at least thirty-four inches (34") and no more than thirty-nine inches (39") off the deck;
    - (iii) Stanchions must be able to withstand sixteen (16) pounds of force without tipping over.
  - c. Employees shall not enter the area between a roof edge and a warning line unless the employee is performing roofing work in the area and:
    - (i) Wears a full body harness that is tied off and capable of withstanding 5,400 pounds; or
    - (ii) Uses a guard rail at the roof edge.
- 3. Work on Steep Roofs (greater than four (4) in twelve (12) and six feet (6') off ground)
  - a. A full body harness must be worn at all times. Roof jacks and planks may be used along with a full body harness and lanyards at the rakes.
- 4. Guardrail Systems
  - a. General Design Requirements
    - (i) Edge of top rails must be forty-two inches (42"), plus or minus three inches (3"), above the walking or working level.
    - (ii) When there is no wall or parapet wall at least twenty-one inches (21") high, install one of the following: (1) midrails; (2) screens; (3) mesh; (4) intermediate vertical members; or (5) equivalent structural members.
  - b. Top Rail and Midrail Requirements and Restrictions
    - (i) Must be at least one-quarter inch ( $\frac{1}{4}$ ") of nominal diameter or thickness.
    - (ii) Mark at 6-foot intervals if wire rope is used.
    - (iii) Must not puncture, lacerate or snag.
    - (iv) The ends of top rails and midrails must not overhang the terminal posts if they constitute a projection hazard.
    - (v) Must be capable of withstanding a 200 pound force.
  - c. Hoist Areas

- (i) At hoist areas, a chain, gate or removable guardrail must be placed across the access opening when hoisting operations are not taking place.

## 5. Personal Fall Arrest Systems (Generally)

- a. Personal fall arrest system means a system used to arrest an employee in a fall from a working level. It consists of an anchorage, connections, a body harness and may include a lanyard, deceleration device lifeline or a combination of these.
- b. Do not use to hoist material.
- c. Personal fall arrest systems may not be attached to guardrails or hoists.
- d. Personal fall arrest systems must bring an employee to a complete stop and limit maximum deceleration distance to three feet six inches (3' 6").
- e. Be rigged so that an employee can neither free fall more than six feet (6') nor contact any lower level.
- f. Limit maximum arresting force of an employee to 1,800 pounds when used with a body harness.
- g. When used at a hoist area, rig to allow movement only as far as the edge of the walking or working surface area.
- h. Connectors must be made of pressed or formed steel or of equivalent materials that are corrosion-resistant and smooth.
- i. Anchorages
  - (i) Ensure that anchorages are independent of any anchorage being used to support or suspend platforms.
  - (ii) Anchorages must be capable of supporting at least 5,000 pounds per employee attached;

## 6. Body Harnesses

- a. Body harness is a design of straps which may be secured about the employee in a manner to distribute the fall arresting forces over at least the thighs, pelvis, waist, chest and shoulders with means for attaching it to other components of a personal fall arrest system.
- b. Employees will be provided with and must use an approved safety harness that is adjusted to properly fit them.
- c. The safety harness must be attached by a lanyard to either a fixed anchor or a lifeline. Lanyards must be securely attached to the building by way of fasteners, screws, or hooks.
- d. The attachment point must be in the center of the wearer's back near shoulder level or above the wearer's head.

## 7. Lifelines

- a. A lifeline is a flexible line for connection to an anchorage at one end which serves as a means for connecting a lanyard or safety harness to the anchorage.
- b. Rope or strap components must be made from synthetic fibers.
- c. Lifelines must be secured above the point of operation to an anchorage or structural member capable of supporting a minimum weight of 5,400 pounds.
- d. Lifelines must have a minimum breaking strength of 5,400 pounds.
- e. Lifelines must be a minimum width of  $\frac{3}{4}$  manila or equivalent. If subjected to cutting or abrasion, it must be a minimum width of seven-eighths inch ( $\frac{7}{8}$ " ) wire core manila rope.

## 8. Lanyards

- a. A lanyard is a flexible line of rope or strap which generally has a connector at each end for connecting a body harness to a deceleration device, lifeline or anchorage.
- b. Rope or strap components must be made from synthetic fibers.
- c. Lanyards must have a breaking strength of 5,000 pounds.
- d. Must be a minimum of one-half inch ( $\frac{1}{2}$ " ) nylon or equivalent.
- e. Lanyards should not go past the roof perimeter.
- f. Lanyard hardware must be drop forged or pressed steel, cadmium plated, smooth, free of sharp edges, and capable of withstanding tensile loading of 4,000 pounds.
- g. Self-retracting Lanyards (See 29 CFR § 1926.502(d)(12) & (13)).

## 9. Training Requirements

- a. Training must be provided to each employee who might be exposed to fall hazards. The program must train employees to recognize hazards and the procedures to be followed in order to minimize the hazards.
- b. Employees must be trained, as necessary, by a competent person qualified in the following areas:
  - (i) The nature of fall hazards in the work area;
  - (ii) Correct procedures for erecting, maintaining, disassembling, and inspecting the fall protection systems to be used;
  - (iii) The use and operation of guardrail systems, personal fall arrest systems, safety net systems, warning line systems, safety monitoring systems, controlled access zones and other protection to be used;

- (iv) The role each employee plays in the safety monitoring system;
- (v) Limitations of mechanical equipment on low-sloped roofs;
- (vi) The correct procedures for the handling and storage of equipment and materials;
- (vii) The correct procedures for erecting overhead protection;
- (viii) The employee's role in fall protection plans; and
- (ix) The standards in 29 CFR § 1926, Subpart M.

10. Certification of Training

- a. The Company certifies training through a written certification containing:  
(1) name of employee trained; (2) dates of training; and (3) Company's signature.
- b. Retraining will be provided when there are: (1) changes in workplace; (2) changes in types of fall protection equipment/systems; and (3) inadequacies in an employee's knowledge or use of fall protection systems.

## Trucks

1. General Requirements for the Use of Motor Vehicles
  - a. Motor vehicles must have service, emergency and parking break systems.
  - b. A safety tire rack, cage or equivalent protection shall be provided and used when inflating, mounting or dismounting tires installed on split rims or rims equipped with locking rings or similar devices.
  - c. All cab glass shall be safety glass that introduces no visible distortion impacting safe operation of the machine.
  - d. Motor vehicles must have an adequate audible warning device and brake light.
  - e. Motor vehicle with an obstructed rear view may only be used when:
    - (i) the reverse signal alarm is audible above the surrounding noise level; or
    - (ii) an observer guides the driver while the vehicle is reversing.
  - f. Tools and materials must be secured when transported in the same compartment with employees.
  - g. All motor vehicles must contain seat belts and anchorages in accordance with 49 CFR Part 571.
2. Inspection and Maintenance of Motor Vehicles
  - a. At the beginning of each shift, check the following parts, at a minimum, to ensure that they are safe and damage-free.
    - (i) service, parking and emergency stopping brakes;
    - (ii) tires;
    - (iii) horn;
    - (iv) steering mechanism;
    - (v) coupling devices;
    - (vi) seat belts;
    - (vii) operating controls;
    - (viii) safety devices;
    - (ix) headlights, brake lights and signal lights;
    - (x) reflectors;
    - (xi) windshield wipers;
    - (xii) defrosters;
    - (xiii) fire extinguishers; and
    - (xiv) other such equipment.

- b. All defects must be corrected before the vehicle is placed in service.

### 3. Training

- a. Operators of powered industrial trucks will receive training on the following: (1) truck related topics (engine or motor operation, refueling, operating limitations; (2) workplace-related topics (surface conditions, load composition, hazardous locations); and (3) the requirements of the operator training section of the standard.

- b. Refresher Training and Evaluation  
Refresher training will be provided when: (1) the operator has been observed operating a vehicle unsafely; (2) the operator has been involved in an accident or near-miss incident; (3) the operator has received an unsatisfactory evaluation; (4) the operator is assigned to drive a different truck; or (5) a change in the workplace could affect safe operation of the truck.

- c. Certification

The Company will certify that each operator is trained and evaluated. The certification will include: (1) operator's name; (2) date of training; (3) date of evaluation; and (4) person performing the training or evaluation.

### 4. Diesel Truck Mounted Crane Operating Procedures

- a. Driver must have current Commercial Driver's License.
- b. Driver must have at least a Class II Driver Endorsement.
- c. Driver must have a physical examination performed by a doctor annually.
- d. Crane Operator must be trained and certified by UPSON COMPANY prior to operating the crane.
- e. Driver and Crane Operator must comply with all current Department of Transportation applicable requirements.
- f. Crane Operator must comply with 29 CFR § 1926.550 and other applicable safety requirements.
- g. Diesel truck must be inspected annually as required by the Department of Transportation.
- h. Crane must be inspected in accordance with 29 CFR § 1926.50.

5. Diesel Truck Driver Operating Procedures

- a. Driver must have current Commercial Driver's License.
- b. Driver must have at least a Class II Driver Endorsement.
- c. Driver must have a physical examination performed by a doctor annually.,
- d. Truck must be inspected annually as required by Department of Transportation.
- e. Driver must comply with all current Department of Transportation and all applicable OSHA requirements.

## Tools

### 1. General Requirements

- a. Inspect tools and equipment to ensure that they are in proper working order before use.
- b. Inspect all cords and plugs for nicks, splices, exposed wall and other damage before use.
- c. Ensure that power tools are grounded, free of splices, and have no exposed bare wires.
- d. Ensure that fluids in equipment are at proper levels at the start of each week's operations.
- e. Make sure saw blades and drill bits are in proper positions on equipment before use.
- f. Always wear safety glasses when cutting with any power tool.
- g. Tools shall be used only for the purpose for which they were designed.
- h. Defective or unsafe tools may not be used.
- i. Throwing or dropping tools to another area of level is prohibited.
- j. Store tools in a suitable location (tool boxes, racks, containers) when not in use.
- k. Tools must be kept clean and free from oil and grease to prevent slipping.

### 2. General Restrictions on the Use of Tools

- a. Do not use electric cords to hoist or lower tools.
- b. Do not use power tools when standing in water.
- c. Do not use any power tools without wearing safety glasses.

### 3. Hand Tools

- a. The use of unsafe hand tools is prohibited.
- b. Wrenches shall not be used when jaws are sprung to the point that slippage occurs.
- c. Impact tools such as drift pins, wedges, and chisels shall be kept free of mushroom heads.
- d. The wooden handles of tools must be kept free of splinters or cracks and shall be kept tight in the tool.

#### 4. Power Operated Tools

##### a. General

- (i) All power tools shall be maintained in a safe condition.
- (ii) The use of unsafe power tools is prohibited.
- (iii) Power tools designed to accommodate guards shall be equipped with such guards when in use.
- (iv) Belts, gears, shafts, pulleys, sprockets, spindles, drums, flywheels, chains, or other reciprocating, rotating or moving parts of equipment shall be guarded if such parts are exposed to contact by employees.
- (v) Employees using hand and power tools who are exposed to hazards of falling, flying, abrasive and splashing objects must wear appropriate personal protective equipment.

##### b. Electrical Power Tools

- (i) Electric power operated tools shall either be of the approved double-insulated type or grounded in accordance with the National Electric Code.
- (ii) All hand held power sanders, grinders with wheels 2 inches (2") in diameter or less, routers, planers, laminate trimmers, nibblers, shears, scroll saws and jigsaw with blade shanks one-quarter inch ( $\frac{1}{4}$ ") wide or less may be equipped with only a positive "on-off" control.
- (iii) All hand held powered drills with a momentary contact "on-off" control may have a lock-on control if turnoff can be accomplished by a single motion of the same finger that turns it on.
- (iv) All other hand held powered tools such as circular saws, chain saws and percussion tools without positive accessory holding means must be equipped with a constant pressure switch that will shut off the power when the pressure is released.

##### c. Pneumatic Power Tools

- (i) Pneumatic power tools shall be secured to the hose or whip by some positive means to prevent the tool from accidentally disconnecting.
- (ii) Safety clips or other retainers shall be securely installed and maintained to prevent attachments from being accidentally expelled.

- (iii) All pneumatically driven nailers, staplers, and similar equipment with automatic fastener feed which operate at more than 100 p.s.i. pressure shall have a safety device on the muzzle to prevent the tool from ejecting fasteners, unless the muzzle is in contact with the work surface.
- (iv) Compressed air shall not be used for cleaning purposes unless the pressure is reduced to 30 p.s.i. or less.
- (v) Hose lines shall be so placed as to eliminate tripping hazards.

d. Power-actuated Tools

- (i) Only trained employees may operate power-actuated tools.
- (ii) Each day before loading, test tool in accordance with the manufacturer's recommended procedure. Defective tools must be removed from service and not used until repaired.
- (iii) Tools must not be loaded until just before intended firing time.
- (iv) Do not leave loaded tools unattended.
- (v) Tools must not be used in an explosive or flammable atmosphere.
- (vi) All tools must be used with the correct shield, guard or attachment recommended by the manufacturer.
- (vii) See, 29 CFR § 1926.302(e) for additional requirements.

e. Abrasive Wheels and Tools

- CFR §
- (i) Abrasive wheels and tools must be used in compliance with 29 1926.303. Some of the requirements include:
  - (ii) Grinding machines must be equipment with safety guards.
  - (iii) The safety guard must cover the spindle end, nut and flange projections.
  - (iv) Floor stand and bench mounted abrasive wheels used for external grinding shall be provided with safety guards (protection hoods).  
The maximum angular exposure of the grinding wheel periphery and sides shall not exceed 90 degrees, except when working requires contact with the wheel below the horizontal plane of the spindle the angular exposure must not exceed 125 degrees.
  - (v) Floor and bench mounted grinders must be provided with adjustable work rests. Work rests must be kept at a distance of no more than
-

- inch from the surface of the wheel.
- (vi) Employees must wear eye protection except when adequate eye protection is provided by a permanently attached eye shield.

## Signs

1. General Requirements for Sign Use
  - a. Provide danger signs where there exists an immediate hazard.
  - b. Use caution signs to warn against potential hazards or to caution against unsafe practices.
  - c. Use accident prevention tags as a temporary means of warning employees of an existing hazard.
  - d. Ensure that traffic control signs are posted at points of hazard.
  
2. Provide Warning Signs Under the Following Circumstances:
  - a. When foot traffic or vehicles should stay clear.
  - b. When persons should not enter certain work areas.
  - c. When roof perimeters might create a danger of falling, such as roof parapets under two feet (2') tall.
  - d. Where roof work creates a danger of falling objects.

## Personal Protective Equipment

### 1. General

- a. Appropriate personal protective equipment (PPE) must be worn by employees working where the potential for injuries and/or health hazards may exist.
- b. The wearing of suitable PPE is a condition of employment. Employees that disregard the PPE requirements may be terminated or subject to disciplinary action.
- c. The Foreman of each job site will conduct a hazard assessment and determine the PPE required for the tasks/activities associated with the project.
- d. The Foreman will assure that appropriate PPE is worn and train employees in proper use.
- e. Employees are responsible for PPE maintenance and are accountable for the care and use of assigned PPE.
- f. The Foreman will ensure that PPE provided to employees is of safe design, properly maintained, sanitary and in good repair.
- g. All PPE used will meet OSHA and/or ANSI standards as required.

*\*The following addresses some of the PPE that may be required.*

### 2. Head Protection

- a. All employees must wear hard hats when loading or unloading equipment and material when overhead lifting is required.
- b. all employees must wear hard hats when it is required by a general contractor when we are subcontracting work with them.
- c. Hard hats must be inspected daily when in use for: cracks, properly arranged securing devices and proper fit.
- d. Replace hard hats if they become defective.

### 3. Hearing Protection

- a. Hearing protection must be worn by employees when decibel levels are greater than 85 decibels for an 8-hour period of time. Hearing protection must be worn when working with drills, guns, saws, and cutting metal. If any noise hurts your ears, wear ear protection. Ear plugs may be obtained from the warehouse.

4. Eye and Face Protection

- a. Safety glasses will be issued to all employees upon employment.
- b. Safety glasses must be an OSHA approved pair of glasses.
- c. Safety glasses must be replaced if they become damaged or if vision is impaired while using them.
  
- d. Employees who use prescription lenses must wear eye protection that incorporates the prescription in its design or that can be worn over the prescription lenses.
- e. Safety glasses will be worn at all times when sawing, grinding, cutting, screwing, heat welding or adhering materials.
- f. Safety face shields will be worn when loading and tending the tar kettle.

5. Hand Protection

- a. Wear cloth or leather gloves when working with items that may damage your hands.
- b. Wear protective gloves when working with products that have a solvent base to protect your hands. Rubber or neoprene gloves or brushes should be used when contacting single ply solvents such as E.P. seam cleaner and Firestone primer. Gloves may be obtained from the warehouse.

6. Training

- a. The Foreman will inform and train the employees in the proper use and limitations of PPE as well as the inspection, maintenance, care and storage of the PPE required.
- b. Training will be provided: (1) upon initial assignment to an area or activity; (2) changes in the workplace or PPE rendering previous training obsolete; and (3) when employees no longer demonstrate a proficiency in PPE use.

## Demolition

### 1. Preparatory Operations

- a. Before demolition operations, a competent person must conduct an engineering survey to determine the condition of the structure. The Company must retain written evidence that the survey was performed.
- b. When working with a damaged structure brace or shore the walls and floors.
- c. Turn off all utility lines and notify affected utility companies in advance.
- d. If necessary to maintain any utilities, relocate and protect such lines.
- e. If hazardous substances (gases, explosives, flammable materials, etc.) are present, test, purge and eliminate hazard before demolition.
- f. Remove glass hazards.
- g. Protect existing roof gutters from ladder and roof puncture damage.
- h. Protect lawns and driveways from truck damage (one man always guides a backing truck).
- i. Locate underground tanks and power lines.
- j. Protect existing shrubs and lawns from debris with tarps (plastic tarps may burn shrubs in hot weather if left in place too long).
- k. Protect employee entrances by sidewalk sheds and/or canopies.

### 2. General Work Practices

- a. Refrain from dropping any heavy object onto the roof deck while working. Damage to interior light fixtures may result (Foremen need to caution delivery men stocking the roof).
- b. Do not back over soft areas.
- c. If rotten wood is discovered on the structure, notify owner and/or foreman before replacement.

### 3. Stairs, Passageways and Ladders

- a. Only stairways, passageways and ladders designated as means of access may be used. Inspect and maintain in a clean safe condition.
- b. Stairwells used in a multistory building must be lighted, protected and substantially covered.

### 4. Chutes Will be Constructed, Used and Maintained Consistent With 29 CFR § 1926.852.

5. Clean-up

- a. Remove all product spills, hand prints, footprints, and debris on the ground before leaving at night.
- b. Leave tools and equipment in an orderly fashion and secure them from theft at the end of each day.
- c. Foremen must ensure that the roof is properly covered and secured at the end of each day to maintain water tightness. The owner *must* have the job foreman's name and phone number in case of an emergency.
- d. Cover trucks traveling to landfills to prevent debris spills on the roadway.

## Torch Down Safety Measures

### 1. General

- a. Each work area will have a fire extinguisher.
- b. Inspect all equipment for damage, wear and deterioration before use.
- c. Check and secure all fittings, hoses, and torch heads before and during use of torch equipment.
- d. Never leave a lighted torch unattended.
- e. Avoid contact with wood or any combustible material for any length of time.
- f. Do not use the flame directly around any open penetration.
- g. Wear gloves (leather or heavy canvas) when working with torches.
- h. Do not wear frayed clothing or frayed shoes when working with torches.
- i. At the end of the day, the Foreman or his designee must check the roof to ensure cool-down of product and to ensure that there is no smoke rising from the product. Critical areas include: penetrations, cants at parapets, and roof edges.