PURPOSE

To provide guidelines to ensure the safety of all employees involved in the duties of elevated work.

REFERENCES

OSHA 29 CFR 1926.21
OSHA 29 CFR 1926.28
OSHA 29 CFR 1926.500
OSHA 29 CFR 1926.750

POLICY

Prior to the start of work where new facilities will be constructed and/or where work will be performed at a client's existing facilities, construction management shall make an initial survey of the types of fall hazards which are expected to be encountered and develop a plan relative to providing the kind and number of safe guards that shall protect against these fall hazards.

DEFINITIONS

This section sets forth the definitions applicable to this procedure.

Fall Protection: Worker six (6) feet above the floor or ground level shall be protected from the possibility of a fall hazard which could result in injury or death.

100% Tie Off: Persons working in areas where the use of safety belts/harnesses with lanyard is required shall be used.

In areas where the 100% tie off requirement is not practical, other means of protection shall be used, i.e., scaffold's, catch platforms, nets, etc.

Anchorage: A secure point of attachment for lifelines, lanyards, or deceleration devices, which is capable of withstanding the forces specified in this procedure.

Approved: Means, for the purpose of this section; tested and certified by the manufacturer,, or any recognized national testing laboratory, to possess the strength requirements specified in this section.

Body Belt: Type 1 safety belt used in conjunction with lanyard or lifeline for fall restraint only.

Full Body Harness: Configuration of connected straps to distribute a fall arresting force over at least the thighs, shoulders and pelvis, with provisions for attaching a lanyard, lifeline or deceleration devices.

DEFINITIONS *continued . . .*

Full Body Harness System: A Class III full body harness and lanyard which is attached to an anchorage meeting the requirements of applicable OSHA or state regulations attached to a horizontal or vertical lifeline which is properly secured to an anchorage(s) capable of withstanding the forces specified in the applicable sections of the applicable OSHA or state regulations.

Christmas Treeing: Lifting of more than one individual load from the load hook of a crane.

Competent Person: An individual knowledgeable of fall protection equipment, including the manufacturers recommendations and instructions for the proper use, inspection, and maintenance; and who is capable of identifying existing and potential fall hazards; and who has the authority to take prompt corrective action to eliminate those hazards; and who is knowledgeable of the rules contained in this section regarding erection, use, inspection and maintenance of fall protection equipment systems.

Continuous Fall Protection: The design and use of a fall protection system such that no exposures to an elevated fall hazard exists. This may require more than one fall protection system or a combination of protective measures.

Control Zone: Area between the warning line and the unprotected sides and edges of a building/structure floor or roof surface.

Deceleration Device: Any mechanism, such as a rope grab, rip-stitch lanyard, specifically woven lanyard or automatic self-tracing lifeline, which serves to dissipate more energy during a fall arrest than does a standard line or strap webbing lanyard.

Drop Line: An independent lifeline secured to an upper anchorage for the purpose of attaching lanyard or a fall protection device. This line must be at least a ¾' manila rope or a ½" nylon rope.

Fall Arrestor System: The use of multiple, approved safety equipment components such as: body harness, lanyards, deceleration devices, drop lines, horizontal and/or vertical lifelines and anchorages, interconnected and rigged as to arrest a free fall. Compliance with anchorage strength requirements specified in the applicable sections of OSHA or state regulations shall constitute approval of the anchorage.

Fall Protection Work Plan: A written document in which the employer identifies all areas on the jobsite where a fall hazard of six (6) feet or greater exists. The plan describes the method or methods of fall protection to be utilized to protect employees, and includes the procedures governing the installation, use, inspection, and removal of the fall protection methods, which are selected by the employer.

DEFINITIONS continued . . .

Fall-Restraint System: An approved device and any necessary components that function together to restrain an employee in such a manner as to prevent that employee from falling to a lower level. When standard guardrails are selected, compliance with applicable sections governing their construction and use shall constitute approval.

Fall Distance: The actual distance from the worker's support to the level where a fall would stop.

Hardware: Meaning snap hooks, D-rings, buckles, carabineers, adjusters, O-rings, that are used to attach the components of a fall protection system together.

Horizontal Lifeline: A rail, wire rope, or synthetic rope that is installed in a horizontal plane between two anchorage's and used for attachment of a worker's lanyard or lifeline device while moving horizontally; used to control dangerous pendulum-like swing falls.

Lanyard: A flexible line of webbing rope, or cable used to secure a body belt or harness to a lifeline or an anchorage point usually 2, 4, or 6 feet long.

Leading Edge: Advancing edge of a floor, roof, or form work which changes location as additional floor, roof or form work sections are placed, formed or constructed. Leading edges not actively under construction are considered to be "unprotected sides and edges" and positive methods of fall arrest or fall restraint shall be required to protect exposed workers.

Lifeline: A vertical line from a fixed anchorage or between two horizontal anchorage's, independent of walking or working surfaces, to which a lanyard or device is secured. Lifeline as referred to in this text is one that is part of a fall protection system used as back-up safety for an elevated worker.

Locking Snap Hook: A connecting snap hook that requires two separate forces to open the gate; one to deactivate the gatekeeper and a second to depress and open the gate which automatically closes when released; used to minimize roll-out or accidental disengagement.

Low-Pitched Roof: A roof having a slope equal to or less than 4 in 12.

Positioning Belt: Single or multiple strap that can be secured around the worker's body to hold the user in a work position; for example, a lineman's belt, a rebar belt or saddle belt.

Restraint Line: Line from a fixed anchorage or between two anchorages to which an employee is secured in such a way as to prevent the worker from falling to a lower level.

DEFINITIONS continued . . .

Roll-Out: Unintentional disengagement of a snap hook caused by the gate being depressed under torque or contact while twisting or turning; a particular concern with single-action snap hooks that do not have a locking gatekeeper.

Rope Grab: A fall arrester that is designed to move up or down a lifeline suspended from a fixed overhead or horizontal anchorage point, or lifeline, to which the belt or harness is attached. In the event of a fall, the rope grab locks onto the lifeline rope through compression to arrest the fall. The use of a rope grab device is restricted for fall restraint applications.

Safety Line: See Lifeline.

Safety Monitor System: A system of fall restraint used in conjunction with a warning line system only where a competent person as defined by this part, having no additional duties, monitors the proximity of workers to the fall hazard when working between the warning line and the unprotected sides and edges, including the leading edge of a low pitched roof or walking/working surface.

Self-Retracting Lifeline: A deceleration device which contains a drum-wound line which may be slowly extracted from or retracted onto the drum under slight tension during normal employee movement and which after onset of a fall automatically locks the drum and arrests the fall.

Shock Absorbing Lanyard: A flexible line of webbing, cable or rope used to secure a body belt or harness to a lifeline or anchorage point that has integral shock absorbers.

Single-Action Snap Hook: A connecting snap hook that requires a single force to open the gate which automatically closes when released.

Snap Hook: A self-closing connecting device with a gatekeeper latch or similar arrangement that will remain closed until manually opened. This includes single action snap hooks that open when the gatekeeper is depressed and double action snap hooks that require a second action on a gatekeeper before the gate can be opened.

Static Line: See Horizontal Lifeline.

Strength Member: Any component of a fall protection system that could be subject to loading in the event of a fall.

Steep Roof: A roof having a slope greater than 4 in 12.

DEFINITIONS continued . . .

Unprotected Sides and Edges: Any side or edge (except at entrances to points of access) of a floor, roof, ramp or runway where there is no wall or guardrail system as defined in this section.

Walking/Line System: For the purpose of this section, any area whose dimensions are 45 inches or greater in all directions through which workers pass or conduct work.

Warning Line System: A barrier erected on a walking and working surface or a low pitch roof (4 in 12 or less), to warn employees that they are approaching an unprotected fall hazard(s).

Work Area: That portion of a walking/working surface where job duties are being performed.

FALL PROTECTION WORK PLAN

Project management shall develop and implement a written fall protection work plan including each area of the work place where the employees are assigned and where fall hazards of six (6) feet or more exist. It is recommended that the written plan be upgraded every month.

The fall protection work plan shall:

- Identify all fall hazards in the work area as the project work progresses.
- Describe the method of fall arrest or fall restraint to be provided.
- Describe the correct procedures for the assembly, maintenance, inspection and disassembly of the fall protection system to be used.
- Describe the method of providing overhead protection for workers who may be in or pass through the area below the work site.
- Be available on the jobsite for inspection.

Prior to permitting employees into areas where fall hazards exist, the employer shall:

- Ensure that employees are trained and instructed in the items described above and . . .
- Inspect fall protection devices and systems to ensure compliance with applicable parts of this procedure.

Training of employees is required by this section and shall be documented and available on the jobsite. See Exhibit D.

FALL RESTRAINT, FALL ARREST SYSTEMS

When employees are exposed to a hazard of falling from a location six (6) feet or more in height, project management shall ensure that fall restraint or fall arrest systems are provided, installed, and implemented according to the following requirements:

Fall restraint protection shall consist of:

- Standard guardrails as described in applicable OSHA or state regulations.
- Safety harness attached to securely rigged restraint lines.
- Safety harness shall conform to ANSI standard.
- Class III full body harness
- All safety harnesses and lanyard hardware assemblies shall be capable of withstanding a tensile loading of 5,000 pounds without cracking, breaking, or taking a permanent deformation.
- Rope grab devices are prohibited for fall restraint applications unless they are part of a fall restraint system designed specifically for the purpose by the manufacturer and used in strict accordance with the manufacturer's recommendations and instructions.
- The project management shall ensure component compatibility.
- Components of fall restraint systems shall be inspected prior to each use for mildew, wear, damage, and other deterioration, and defective components shall be removed from service if their function or strength have been adversely affected.
- Anchorage points used for fall restraining shall be capable of supporting 3,000 pounds.
- Restraint protection shall be rigged to allow the movement of employees only as far as the sides and edges of the walking/working surface.
- A warning line system as prescribed in OSHA 1926.500 to protect worker engaged in duties between the forward edge of the warning line and the unprotected sides and edges, including the leading edge of a low pitched roof or walking/working surface.
- Warning line system as described in OSHA 1926.500 are prohibited on surfaces exceeding a 4 in 12-pitch, and on any surface whose dimensions are less than 45 inches in all directions.

Fall arrest protection shall consist of:

Full Body Harness

- An approved Class III body harness shall be used.
- Body harness system or components subject to impact loading shall be immediately removed from service and shall not be used again for employee protection.
- All safety lines and lanyards shall be protected against being cut or abraded.

FALL RESTRAINT, FALL ARREST SYSTEMS

Full Body Harness *continued . . .*

- Body harness system shall be rigged to minimize free fall distance with a maximum free fall distance allowed of 6 feet, and such that the employee will not contact any lower level.
- Hardware shall be drop forged, pressed or formed steel, or made of materials equivalent in strengths.
- Hardware shall have a corrosion-restraint finish and all surfaces and edges shall be smooth to prevent damage to the attached body harness or lanyard.
- When vertical lifelines *(drop lines)* are used, not more than one employee shall be attached to any one lifeline.
- Full body harness systems shall be secured to anchorage's capable of supporting 5,000 pounds per employee except:

    - When self-retracting lifelines or other deceleration devices are used which limit free fall to two feet, anchorages shall be capable of withstanding 3,000 pounds.

    - Independent lifelines *(drop lines)* shall have a minimum tensile strength of 5,000 pounds, except the self-retracting lifelines and lanyards which automatically limit free fall distance to two feet or less shall have a minimum tensile strength of 3,000 pounds.
    - Horizontal lifelines shall have a tensile strength capable of supporting a fall impact load of at least 5,000 pounds per employee using the lifeline applied anywhere along the lifeline.
    - Lanyards shall have a minimum tensile strength of 5,000 pounds.
    - All components of body harness systems whose strength is no otherwise specified shall be capable of supporting a minimum fall impact load of 5,000 pounds applied at the lanyard point of connection.
    - Full body harness systems shall be inspected prior to each use for mildew, wear, damage, and other deterioration, and defective components shall be removed from service if their function or strength has been adversely affected.

Additional procedures that require the use of fall restraint and/or fall arrest protection for employees are listed below:

- Ladder
- Open Sided Floors
- Placing and Removal of Forms

EXHIBIT "D"

FALL PROTECTION PLAN

In accordance with the Safety Program, the following fall protection program is hereby formulated for

_____

Located at the following jobsite address:

_____

_____

A. Identify all fall hazards in the work area during construction.

1. Elevations of six (6) feet or greater

   a) Leading Edges _____
   b) Perimeter Edge_____
   c) Elevator Openings _____
   d) Stairway Openings _____
   e) Vent, Mechanical Openings_____
   f) Open-Sided Floors _____
   g) Articulated Snorkel Lifts_____
   h) Scaffolds_____
   i) Stairways_____
   j) Other (Explain)_____

B. Method of Fall Arrest/Restraint Provided.

1. Elevations of six (6) feet or greater (Leading Edge, Roof, Etc.)
   - Safety Harness/Lanyards _____
   - Safety Belt/Lanyards_____
   - Horizontal Lines_____
   - Standard Guardrails_____

2. Deck/Floor Openings
   - Standard Guardrails_____
   - Other (Explain)_____

3. Stairways
   - Handrails_____

4. Articulated Lifts
   - Safety Belt/Harness_____

5. Scaffolds
   - Guardrails and Toeboards _____

C. Employee Training and Instruction of Fall Protection Systems

1. Employee Training — Yes _____ (List) / No _____ (Explain)

_____

_____

_____

_____

2. Documentation Available of Training Received — Yes _____ / No _____

Location of Documentation:

Jobsite _____

Office _____

Fall Protection System Procedures

1. Assembly
   - By Whom (Explain)

   _____
   _____
   _____

2. Maintenance of Equipment or Systems Used
   - By Whom (Explain)
   - As Needed

   _____
   _____
   _____

3. Inspection of Equipment or Systems Used
   - Person(s) Assigned _____
     _____
   - Date of Inspection(s)_____
   - Equipment or Systems Inspected (Explain)

   _____
   _____
   _____

4. Procedures for Handling, Storage and Securing Tools and Materials
   - Describe how materials will be moved within jobsite.
   - Cranes _____ Fork Lifts _____ Other _____
   - Limit Overhead Hazards_____
   - Material Secured When Placed in Position_____
   - Equipment Secured When Not in Use_____

5. Method(s) of Providing Overhead Protection

   - Barricading (Eliminating Access)_____
   - Warning Signs Posted_____
   - Hard Hats Required _____
   - Toeboards Installed Around Floor Opening_____
     Other (Explain)_____

E. Method for Prompt, Safe Removal of Injured Worker

1. Initiate emergency medical system – 911_____
2. Utilize lift truck with personnel platform_____
3. Utilize articulated boom lift basket_____
4. Erect ladders_____
5. Use drop lines or retraction device_____
6. Assist medical, fire or emergency response teams_____
7. Other (Explain)

_____
_____
_____
_____

F. Other Safety Measures, Systems to be used to Insure and Establish an Adequate Fall Protection Program.

1. (Explain)

_____
_____
_____
_____
_____
_____
_____
_____

Purpose

To provide guidelines for fire protection and prevention in shops and on jobsites.

Guidelines

Do not smoke except in an area designated by the Supervisor as a "designated smoking area." No smoking is allowed on jobsites.

Extinguish cigarettes, pipes, cigars, matches, etc. and dispose of in proper receptacles.

Wooden (kitchen type) matches are not allowed. Disposable lighters are not allowed in any area where welding is in progress. Use approved lighters or safety matches only.

Flammable liquids are identified as such. Know the flammables on your job and how to handle them.

Store flammables only in approved containers.

Do not smoke while using flammable liquids.

Open containers of flammables used to clean must be kept closed when not in use.

All bulk flammables shall be stored in the heated room in the shop. This area shall be maintained free of obstructions to facilitate access in an emergency.

All flammable liquid storage areas shall be clearly defined and posted as "No Smoking Areas."

Bulk storage of flammable liquids in yard areas, parking areas or adjacent to the shop shall be approved, in advance, by the Shop Manager.

All bulk containers, drums, caddies, etc., that contain flammable liquids, shall be provided with a grounding system to prevent accumulation of static electrical charge. Any pumps used shall be of the approved type and have bonding wires between the bulk container and the container being filled.

Flammable liquids to be stored in foreman's trucks shall not exceed 60 gallons or the quantity needed for that day's work whichever is less. Individual containers shall not exceed 5 gallon capacity and shall be marked as to their contents.

Approved safety cans shall be used for storing and dispensing small quantities of flammable liquids. Such containers shall be stored in approved metal cabinets or at least 25 feet from the shop.

Metal cabinets that contain flammable liquid storage shall be identified as follows: Painted in yellow and lettered in red: **"FLAMMABLE"**

The use of open containers and glass containers is strictly prohibited. Flammable liquids shall not be placed, stored or transported in such containers.

Flammable liquid containers (safety cans) shall be maintained in good mechanical order. All integral parts or devices such as seals, closing springs, flash arresters and similar items shall be maintained. Each container shall be inspected prior to use by those using it and defects reported to the Shop Manager.

All flammable liquid containers shall be plainly marked or identified.

The Shop Manager shall periodically inspect safety cans. All defective cans shall be removed from service and be disposed of.

Under no circumstances shall employees be allowed to dismantle, alter or repair safety cans without permission of the Shop Manager.

The application of air pressure or compressed gas to any flammable liquid container for any purpose is strictly prohibited.

Flammable liquids shall not be used or stored within 20 feet of sources of heat or ignition. Conditions or circumstances may dictate greater distances or complete isolation.

Defective faucets, spigots or pumps on bulk containers shall be replaced immediately.

Only approved explosion proof electrical devices and/or connectors shall be used in the presence of flammable liquids or vapors.

Rags or other combustible materials used to absorb or wipe up flammable liquids shall be disposed of in approved receptacles. If rags are to be washed and reused, keep in covered metal container.

All employees required to work with flammable liquid shall be thoroughly instructed in the proper use, handling and storage of them.

Employees shall not use, handle or transport flammable liquids unless authorized to do so by Supervisors.

The transportation of flammable liquids inside passenger compartment of company owned or operated vehicles is prohibited.

Temporary heating devices

Fresh air shall be supplied in sufficient quantities to maintain the health and safety of workers. Where natural means of fresh air supply is inadequate, mechanical ventilation shall be provided.

Temporary heating devices shall be installed to provide clearance to combustible material not less than the amount shown in Table F-4.

Temporary heating devices, which are listed for installation with lesser clearances than specified in Table F-4, may be installed in accordance with their approval.

TABLE F-4

Heating appliances	Minimum clearance, (inches)		
	Sides	Rear	Chimney Connector
Room heater, circulating type.....	12	12	18
Room heater, radiant type.....	36	36	18

Heaters not suitable for use on wood floors shall not be set directly upon them or other combustible materials. When such heaters are used, they shall rest on suitable heat insulating material or at least 1-inch concrete, or equivalent. The insulating material shall extend beyond the heater 2 feet or more in all directions.

Heaters used in the vicinity of combustible tarpaulins, canvas, or similar coverings shall be located at least 10 feet from the coverings. The coverings shall be securely fastened to prevent ignition or upsetting of the heater due to wind action on the covering or other material.

Heaters, when in use, shall be set horizontally level, unless otherwise permitted by the manufacturer's markings.

Oil-fired heaters: Flammable liquid-fired heaters shall be equipped with a primary safety control to stop the flow of fuel in the event of flame failure. Barometric or gravity oil feed shall not be considered a primary safety control.

FLAMMABLE LIQUID AND GAS STORAGE

All gases and liquids should be considered as flammable unless the label clearly indicates that no such exposure exists. Conditions on construction sites change so rapidly that extreme care is necessary whenever flammable liquids or gases are being used. Flammable liquids and gases can be ignited by open flames, sparks, or excessive heat, so it is necessary that each of these factors be considered when setting up safe storage facilities for the items. Oxygen cylinders shall be separated from fuel gas cylinders by a distance of 20 feet and stored outside of buildings.

No other equipment or materials should be contained in the area where flammable or combustible liquids or gases are stored. This is especially true for compressed gases and petroleum products.

The "No Smoking" must be vigorously enforced. These areas shall always be located so that local fire protection will always have access to the material.

Only approved containers can be used for the storage of flammable liquids, and each container must have an emergency-venting device, a flash arresting screen, and spring closing lid and spout collar. Steel or polyethylene (with plated steel fittings) safety cans may be used. All containers from which flammable liquids are to be dispensed shall be grounded and when transferring flammable liquids, the dispensing container shall be bonded to the receiving container.

PURPOSE

To provide guidelines for the safe use of hand tools.

POLICY

General Requirements

- Use hand tools only for the purpose for which they were designed.
- Use tools that are in good condition. Worn or broken tools must be repaired or replaced.
- ***Always use appropriate safety equipment***
- Store tools that are not in use. Proper storage includes tool boxes, tool racks, and cabinets.
- Do not leave tools on overhead work areas where they may fall and strike someone below.
- Do not carry a sharp or pointed tool in pockets or belts unless the point or edge is protected with a cover.

HAMMERS AND SLEDGES

- ***Always wear appropriate eye protection***.
- Check behind you before swinging a hammer or sledge.
- Keep your eye on the object to be hit.
- Never use a damaged hammer or sledge.

WRENCHES

- Never use a "cheater" to increase leverage.
- Whenever possible, pull on the wrench handle rather than push. Adjust your stance to avoid a fall if the wrench slips.
- Repair or discard any worn or damaged wrenches.
- Never use hand sockets on power or impact tools.
- Never use a hammer on a wrench unless it is the striking face type.

PLIERS

- Do not use pliers for cutting hardened wire unless specifically made to do so.
- Never use pliers as a striking tool.
- Use dielectric pliers and shut off power when working with electricity.

SCREWDRIVERS

- Use a screwdriver with the right type of blade, and one that properly fits the size of screw.
- Never use a bent or damaged screwdriver.
- Do not use a screwdriver as a pry bar or a chisel.
- Keep handles free of grease and oil.

SAWS

- ***Always wear appropriate eye protection.***
- Keep saw blades sharp; re-sharpen, or replace blades that have lost good cutting teeth.
- Lubricate hacksaw blades with light machine oil to prevent heat build-up, which can cause the blade to break.
- Store saws so that there is no chance for someone to fall onto or bump into the blade.

PURPOSE

To provide the basic guidelines necessary for a good housekeeping program which will be a part of the daily routine at each jobsite, with clean-up being a continuous operation.

POLICY

Good housekeeping is an important element of accident. Good housekeeping will be planned at the beginning of a job and will be carefully supervised and followed through to the final clean-up. A clean and orderly work place will not only contribute greatly to the prevention of accidents and injuries, but will also lend itself to the proper utilization of available facility space.

HOUSEKEEPING

Responsibility for good housekeeping shall be assigned to each Supervisor. Housekeeping shall not be left un-done and left to someone else's discretion. Duties shall be assigned to one or more responsible persons.

Storage Areas: All materials stored in tiers will be secured to prevent sliding, falling or collapse. Aisles and walkways shall be kept clear of loose materials and tools. Combustible material shall not be stored under stairways. Stored materials will not obstruct exits.

Work Areas: Clean up loose materials, waste, etc., immediately. This is especially important on scaffolds and in the vicinity of ladders, ramps, stairs and electrical or mechanical equipment. Tools and loose materials shall be removed immediately if a hazard is created.

Areas Used by Personnel: Empty bottles, containers, papers, and discarded equipment shall not be allowed to accumulate where lunches are taken on the jobsite. Use trash disposal cans.

Oil and Grease: Spills of oil, grease, or other liquids shall be removed immediately or sprinkled with sand or "Oil-Dry" or similar absorbant.

Disposal of Waste: An effective means of preventing litter is the provision of suitable receptacles for waste, scrap, etc. Combustible waste, such as oily rags, paper, etc., shall be stored in a safe place, such as a covered metal container, and disposed of regularly as hazardous waste. All containers should be labeled as to permissible contents. Common trash, which does not contain any hazardous waste, shall not be stored or disposed of in bags or containers marked for hazardous waste.

Protruding Nails: Protruding nails shall either be removed or bent over in such a way that they no longer present a risk. This shall be done as the hazard develops and not at a later time. Cleaned lumber shall be stacked in orderly piles. Workers performing this task shall wear heavy gloves and hard-soled work shoes.

Lighting: Adequate lighting shall be provided in or around all work areas, passageways, stairs, ladders, and other areas used by personnel.
Unobstructed Access: There must be unobstructed access, at all times, to such areas as electrical panels, safety disconnect switches, fire extinguishers, emergency exits, etc.

SANITATION

Contaminated drinking water or lack of proper sanitation at the jobsite could cause typhoid fever, dysentery, and other diseases. It is essential that the provision of adequate sanitary facilities to accommodate the number of workers involved be one of the first operations initiated at the jobsite.

Temporary toilets shall be maintained in accordance with local, state and federal ordinances. Toilets shall be constructed so as to shield the occupants from view and protect against weather and falling objects. They shall be lighted and ventilated, and all windows and vents screened. Adequate tissue shall be provided. All toilet facilities shall be cleaned and emptied when necessary.

DRINKING WATER

An adequate supply of fresh, portable water, from a city water line if possible, shall be provided at a readily accessible location for drinking purposes. Portable water containers, used to dispense drinking water, must be capable of being tightly closed, sealed and equipped with both a tap and a paper cup dispenser. Where paper cups are supplied, a receptacle for disposing of the used cups should be provided. The use of pails and dippers or a common drinking cup for dispensing drinking water is prohibited. When city water is not used, periodic testing of the water is required.

Any container used to distribute drinking water must be clearly marked as to the nature of its contents and not used for any other purpose. If for any reason water, which is unfit for human consumption, is provided at the jobsite, it must be identified and labeled to clearly indicate that the water is unsafe for drinking, washing, or cooking purposes. Any worker observed removing the lid of a water container, except for those workers assigned to sanitize and clean such containers, shall be subject to disciplinary action including possible discharge.

Portable water containers must be cleaned daily.

TEMPORARY FACILITIES:

A) GFCI's or assured grounding program.
B) Site/storage layout for placement of materials, shanties, equipment, etc.
C) Communication system.
D) Water including drinking water, and sanitary facilities.
E) Job site security equipment, fencing, lights, etc.
F) Temporary access and parking facilities.

PAPER WORK REQUIREMENTS:

A) Emergency phone numbers.
B) Copy of assured grounding program if in use.
C) Contractor's safety program and rules.
D) Approvals for deep trenches, high scaffolds, demo surveys, shoring, etc.
E) Safety instructions for lasers, powder actuated tools, first aid, etc.
F) Required signs (hard hats, no trespassing, danger, caution, etc.
G) Accident and treatment report forms.
H) Written hazard communication program.

EMERGENCY NEEDS:

A) Trained first aid providers.
B) First aid kit (check weekly).
C) Emergency evacuation plans.
D) Fire extinguisher.

PROTECTIVE EQUIPMENT:

A) Hard hats.
B) Safety glasses.
C) Respirators.
D) Ear plugs.
E) Guarding material for scaffolds and floor holes, if site dictates.
F) Safety cans for flammable liquids.
G) Safety belts, lifeline, and lanyards or nets where fall hazards exist.
H) Trench and excavation shoring materials when necessary.
I) Personal protective equipment for visitors.
J) Flashers, signals, barricades and reflective clothing for traffic control.

PURPOSE

To provide guidelines for the selection and design of ladders, and maintenance, inspection and proper use of ladders.

POLICY

General Requirements

Ladders present one of the major hazards in construction work, and their improper use is the cause of many serious accidents. An analysis of accidents involving ladders revealed that the five principal causes of such accidents are:

- Ascending or descending improperly
- Failure to secure ladder at top and/or bottom
- Structural failure of the ladder itself
- Carrying objects in hands while ascending or descending ladder
- Employees leaning out from the ladder (over reaching)

LADDER SELECTION

Great care should be taken in the selection of the proper size and design of the ladder for the use intended.

STRAIGHT LADDERS

Ladders must be selected to be of sufficient length to extend not less than thirty-six inches (36") above any platform or landing which they serve, and must be secured on top and/or bottom.

All portable straight ladders must be equipped with approved safety shoes.

All metal ladders are electrical conductors. Their use around electrical circuits of any type, or places where they may come in contact with such circuits, is not recommended. Metal ladders should be marked with signs reading **"CAUTION: DO NOT USE AROUND ELECTRICAL EQUIPMENT."**

STEP LADDERS

Step ladders sometimes referred to as "A" frame ladders, must have positive locking spreaders which will be fully spread and locked when the ladder is in use.
Step ladders will not be used as straight ladders. They should be of sufficient height to preclude the necessity of employees using the top two steps of the ladder. Workers are not allowed to work from the top two steps of a step ladder.

Step ladders shall be firm and well constructed. Special care shall be taken when setting any ladder on grating. Often the feet of a step ladder can slip through the grating causing the ladder to fall. Step ladders shall be tied off or a worker shall hold the ladder when the user is 6 feet or more above the floor.

LADDER USAGE

The feet of the ladder shall be placed approximately one-quarter of its supported length away from the vertical plane of its top support. Only light, temporary work should be performed from ladders. Workers should be cautioned frequently about the danger of trying to reach too far from a single setting or pulling, pushing, prying, etc.

Ladders shall not be placed in front of doors which open toward the ladder unless the door is locked or otherwise guarded.

Ladder feet shall be placed on a firm base and the area in the vicinity of the bottom of the ladder shall be kept clear.

When using straight ladders, both the top and bottom of the ladder shall be secured to prevent displacement. Use ladder shoes, stakes, or other means of securing the ladder.

Ladders leading to landings, walkways, platforms, etc., must extend thirty-six inches above this point and must be securely fastened to prevent moving. Long ladders must be braced at intermediate points as necessary to prevent springing.

When ascending or descending ladders, workers are to face the ladder and use both hands to hold onto the side rails or rungs. If material must be moved from one level to another, a rope, block and tackle, or other means must be used. Materials are not to be hand carried on ladders.

Ladders must never be used in horizontal position as runways or scaffolds.

LADDER INSPECTION

Wood ladders must be inspected prior to each use and monthly for deterioration and damage. Close visual inspection is recommended in preference to load testing.

Metal ladders require frequent inspection. All parts should be checked for wear, corrosion and structural failure.

No employee will be allowed to use for any reason any ladder that has broken, loose or cracked rungs, side rails or braces. Any ladder found in this condition will be removed from service immediately.

LADDER MAINTENANCE

Wood ladders should be periodically treated with a clear preservative such as varnish, shellac, or linseed oil. Ladders must not be painted as painting covers up structural defects. All metal fittings on wood ladders should be carefully checked for rusting or corrosion.

Metal ladders should have the rungs cleaned to prevent accumulation of materials that might destroy their non-slipping properties and all metal fittings should be carefully checked for rust and corrosion.

When not in use, all types of ladders shall be stored under suitable cover protected from the weather. Ladders stored horizontally should be supported at both ends and at intermediate points to prevent sagging of the middle section, which tends to loosen the rungs and warp the rails. A rope should be spliced onto one of the top rungs of a ladder to provide a ready method to secure the ladder or the ladder to the support.

PURPOSE

To establish the minimum required procedures for lockout and tagout of energy sources. This policy shall be used to provide the maximum safe working conditions for employees performing maintenance or service activities where the unexpected energization, start up or release of stored energy could occur and cause injury. All potentially hazardous energy shall be isolated, locked and tagged out.

POLICY

All employees shall be instructed in the safety significance of lockout and tagout procedures. Subcontractors shall designate a qualified person to train affected employees on the purpose and proper use of the procedure.

A survey shall be made by *Plummer Concrete & Associates, Inc.* supervision and/or subcontractor supervision to locate and identify all energy sources to be certain which switch, valve or other energy isolating devices apply to the equipment to be locked or tagged out. More than one energy source (electrical, mechanical and/or others) may be involved. Questionable energy source problems shall be resolved before job authorization is obtained and lockout/tagout commences . . . ***"If in doubt – Lock it out!"***

The project shall supply lockout locks and tags. All subcontractors shall use project-supplied locks and tags for this procedure.

All locks shall be individually keyed with a unique number engraved on the face of the lock and keys.

All locks shall have two and only two keys. One key will be issued to the employee with the lock. The second key will be placed in a secured area within the job trailer under the supervision of *Plummer Concrete & Associates, Inc.* supervisor. The second key will be issued to the employee's supervisor only after completion of the steps outlined below **("Removing an Abandoned Lock")**. Locks that are damaged and/or found with more than two keys or only having one key will be removed from service and will be destroyed. A charge of twenty ($20) dollars will be assessed to any employee who loses the key that have been assigned to him/her.

A master log of all locks issued to employees will be kept in the *Plummer Concrete & Associates, Inc.* job trailer. The log will show which locks (by number) are issued to which employee (by name and company, Exhibit E).

The *Plummer Concrete & Associates, Inc.* project supervisor or his/her authorized appointee will issue the locks, keys and tags and will maintain the lock/key/tag log.

SEQUENCE OF LOCKOUT PROCEDURE

1. Notify all affected employees that a lockout/tagout is required and the reason therefore.
2. If the equipment is operating, shut it down by normal procedures.
3. Operate the switch, valve or other energy-isolating device so that each energy source (electrical, mechanical, hydraulic, etc.), is isolated from the equipment. Stored energy (such as that in capacitors, springs, elevated machine members, rotating flywheels, hydraulic systems and air, gas, steam or water pressure) shall be dissipated or restrained by methods such as grounding, repositioning, blocking or bleeding down.
4. Lockout and tagout the isolating devices with an assigned individual lock. Employee shall also sign and date the tag indicating name, company and his/her home telephone number.
5. After ensuring that no personnel are exposed, and as a check, having isolated the energy sources, operate the hand switch or other normal operating controls to make certain the equipment will not operate.
6. **CAUTION: Return operating controls to neutral or "off" position after the test.**
7. The equipment is now locked and tagged out.
8. On completion of work or shift, ensure all tools and equipment are clear. Leave controls in off or neutral position. Remove all locks and tags and return them to the *Plummer Concrete & Associates, Inc.* job trailer to be checked in by the authorized person.

PROCEDURE INVOLVING MORE THAN ONE PERSON

In the preceding step, if more than one person is required to lock and tagout equipment, each shall place his/her assigned lock and tag on the energy-isolating device. Multiple lock devices will be issued when checking out the locks and tags.

RULES FOR USING LOCKOUT/TAGOUT PROCEDURE

All equipment shall be locked and tagged out to protect against accidental or inadvertent operation when such operation could cause injury to personnel. Do not attempt to operate any switch, valve or other energy-isolating device bearing a lock and/or tag. To do so shall result in severe disciplinary action, including dismissal from the project.

REMOVING AN ABANDONED LOCK

This procedure will be used for removing locks of employees who are no longer on site.

1. Identify the owner of the lock by checking the master list at the *Plummer Concrete & Associates, Inc.* job trailer.
2. Contact the employee assigned to the lock regardless of whether the employee is at work or at home. The employee shall remove the lock.
3. If the employee cannot be found:
    a) The employee's supervisor shall contact the *Plummer Concrete & Associates, Inc.* Supervisor.
    b) The *Plummer Concrete & Associates, Inc.* Supervisor and the employee's Supervisor will fill out the "Emergency Removal of Employee's Safety Lock" form, Exhibit F.
    c) The *Plummer Concrete & Associates, Inc.* Supervisor and the employee's Supervisor will walk the entire system to ensure that all work is complete, all clean-up is performed and that the system is safe to remove the lock.
    d) The *Plummer Concrete & Associates, Inc.* Supervisor will then give the second key (which was in the secured area in the job trailer) to the employee's Supervisor, so that he/she may remove the lock/tag.
4. The employee's supervisor shall ensure that the employee whose lock was removed is notified before returning to work that his lock was removed.

(EXHIBIT E)

KEY LOG

Name	Number	Number	Tag Number	Date Out	Date In	Initials

(EXHIBIT F)

EMERGENCY REMOVAL OF EMPLOYEE'S SAFETY LOCK

To: _____ From: _____

Date: _____/_____/_____ Time: _____AM / PM

Location/Equipment: _____

Lock Assigned To: _____

Comments: _____

_____

Attempts To Notify Lock Owner:

Name	Date	Time	Successful (YES / NO)
_____	____/____/____	_____	_____
_____	____/____/____	_____	_____
_____	____/____/____	_____	_____

Lock Owner Notified When He/She Returned To Site:

Name	Date	Time	Employee Signature
_____	____/____/____	_____	_____

Approvals:

Project Manager: _____

Safety Representative: _____

When a medical facility is not reasonably accessible, a person trained to render First Aid/CPR will be available at the work site. First Aid supplies must be readily available.

Telephone numbers of physicians, hospitals, or ambulances must be conspicuously posted.

PURPOSE

To provide guidance for the protection of personnel operating mobile cranes or working in the area of operation.

POLICY

Equipment Inspection and Testing

Upon its arrival and before its use on the project and at 30-day intervals thereafter, a competent person will inspect each mobile crane for mechanical defects. Maintenance records will be completed and retained. A third party inspector approved by the Department of Labor will perform all annual crane inspections. When a crane has been dismantled or has had major repairs, a third party inspector approved by the Department of Labor will inspect it.

It is recommended that the equipment be load-tested only in accordance with the manufacturer's specifications and limitations and American National Standard Institute (ANSI) B30.5 Current, Mobile and Locomotive Cranes.

No modifications or alterations that affect the capacity or safe operation of the equipment will be made by the project or an individual without the manufacturer's written approval.

Operator Authorization

All mobile crane operators must be instructed in or given the opportunity to read and understand the manufacturer's Operators Manual for assigned make and model machine, and applicable OSHA and ANSI standards. The mobile crane operator must be trained and authorized to operate the specific make and model crane assigned.

Operations

Each day, the operator, prior to starting work, will check all safety features of the cranes. These include but are not limited to:

- Fire extinguisher
- Seat belts
- Tire pressure
- Widow glass
- Horn
- Back-up alarm
- Lights
- Signs

Accessible areas within the swing radius of the rotating superstructure counterweight of a crane will be barricaded to prevent employees from being struck or crushed by the counterweight unless the superstructure is elevated 7-feet or more.

The ground shall be level to within 1° of the horizon. All applicable danger signs shall be posted. This includes but is not limited to: 1) Danger Electrical Hazard; 2) Swing Radius Warnings; 3) Step Warnings.

The hand signals to be used are those prescribed by the ANSI standard applicable to each crane. Only one individual will assume the signaling duties and no other person shall signal during the lift, with the exception of a person giving an emergency stop signal.

A copy of the manufacturer's Operator's Manual for each make and model machine must be on the project site and the manufacturer's specifications and limitations noted in it will be observed.

In the operations and use of any hydraulic crane, when both an auxiliary and main hoist lines are reeve, an anti-two blocking warning system is required on both auxiliary and main hoist lines.

Attachments used with cranes will not exceed the capacity rating or scope recommended by the crane manufacturer.

No person will ride the headache ball, the hook, or the load being handled by the crane. All operations involving the use of suspended personnel baskets or platforms shall comply with OSHA regulations and the crane shall be equipped with a positive action anti-two blocking device.

Equipment will not be lubricated while in use unless it is designed for safe lubrication application while in use.

No person(s) shall ride in the machine; the machine should not be used for personnel transportation or be equipped with a personnel carrier, unless specific approval from the Safety Department is secured.

Electrical Hazards

A crane will not be operated, under any circumstances, wherein any part of the crane or load will come within 20 feet of energized distribution lines rated 50 kV or below unless the following conditions are met:

- The lines have been de-energized and are grounded at the point of work.
- Insulating barriers that are not part of the hoisting equipment have been erected.

For lines rated over 50 kV, the minimum clearance between lines and any part of the machine or load will be 10 feet plus 0.4 inch for each kilovolt over 50 kV or twice the length of the line insulator. The clearance will not be less than 10 feet.

All lines will be considered energized unless the person or utility owning the lines indicates that they are not energized and that the lines are grounded at the point of operation.

Traveling With a Load (Pick and Carry)

Traveling with a load (pick and carry) is not recommended as a means of transporting loads from one location to another on the project and should be used as a last resort. The use of farm wagons, forklifts, boom trucks, and flatbed trucks should be used to transport these loads rather than "pick and carry" operations.

Traveling with suspended loads entails many variable, i.e., the type of terrain, boom length, momentum in starting and stopping, etc. Therefore, it is impossible to formulate a single standard procedure with any assurance of safety. Thus, when traveling with a load, the operator must evaluate the prevailing conditions and determine the applicable safety precautions. No matter what, manufacturer guidelines shall not be exceeded.

The following precautions would fall into a general category:

- **DO NOT** exceed rated "on rubber" capacity chart.
- Position the boom parallel to the direction of travel.
- Engage the swing (house) lock.
- Maintain as short a boom length and as low a boom angle as possible.
- Secured load off carrier.
- Provide tag or restraint lines to snub load swing.
- Load should be carried close to ground.
- Do not start and travel until outriggers are fully stowed (retracted).
- Terrain must be smooth, firm, and level.
- Maintain travel speed suitable to terrain.
- Avoid sudden starting and stopping.
- Maintain correct tire pressure for type of tires used.
- Always use flagmen, both front and rear, to give directions and watch for hazards.
- Signalman should watch for power lines and other overhead obstructions.
- No person shall ride on the machine during "pick and carry" operations.

Wire Rope

Wire rope with one or more of the following defects will be removed or replaced immediately. If one wire rope of a set (Pendant lines, multi-leg slings, etc.) requires replacement, entire set of ropes will be replaced.

- In standing ropes, more than two broken wires in one lay in areas beyond end connections or more than one broken wire at an end connection.
- In running ropes, six randomly distributed broken wires in one lay or three broken wires in one strand in one lay
- Wear of one-third of the original diameter of the outside individual wires caused by abrasion, scrubbing, flattening, or peening.
- Kinking, crushing, bird cageing, or any other damage resulting in distortion of the rope structure.
- Evidence of heat damage from any cause.
- Reduction from nominal diameter of more than: 1/64 inch for diameters up to and including 5/16 inch; 1/32 inch for diameters from 3/8 inch up to and including ½ inch; 3/64 inch for diameters 916 inch to and including ¾ inch; 1/16 inch for diameters from 7/8 inch up to and including 1 1/8 inches; 3/32 inch for diameters from 1 ¼ inches up to and including 1 ½ inches.

Notices and Posting

Rated load capacities, recommended operating speeds, special hazards warnings, operating notes, and special instructions will be posted on all equipment and will be visible to the operator while he is at the control station. Illustrations of the hand signals used in connection with the operation of equipment will be posted at the project site.

RECORDS

Maintenance records shall be maintained at the Shop.

(EXHIBIT G)

MOBILE CRANE LIFTING PLAN

LOCATION:_____ DATE OF LIFT:_____

LOAD DESCRIPTION:_____

LIFT DESCRIPTION:_____

A. WEIGHT

1. Equipment Condition New ☐ Used ☐
2. Weight Empty _____lbs.
3. Weight of Headache Bail _____lbs.
4. Weight of Block _____lbs.
5. Weight of Lifting Bar _____lbs.
6. Weight of Slings & Shackles _____lbs.
7. Weight of Jib Erect ☐ Stored ☐ _____lbs.
8. Weight of Headache Ball on Jib _____lbs.
9. Weight of Cable (Load Fall) _____lbs.
10. Allowance for Unaccounted Material or Equipment _____lbs.
11. OTHER _____ _____lbs.

TOTAL WEIGHT [lbs.]

Source of Load Weight:

_____

Weights Verified By:

_____

B. JIB

Erected_____Stored_____

1. If Jib to be used_____
2. Length of Jib_____
3. Angle of Jib_____
4. Rated Capacity of Jib (From Chart) [ ]

C. CRANE PLACEMENT

1. Any Deviation from Smooth Solid Foundation in the Area?_____

_____

_____

2. Electrical Hazards in Area? _____

_____

_____

3. Obstacles or Obstructions to Lift or Swing? _____

_____

_____

4. Swing Direction and Degree (Boom Swing) _____

_____

D. CABLE

1. Number of Parts of Cable _____
2. Size of Cable _____

E. SIZING OF SLINGS

1. Sling Section
   a. Type of Arrangement_____
   b. Number of Sings in Hook-up _____
   c. Sling Size _____
   d. Sling Length _____
   e. Rated Capacity of Sling [ ]
2. Shackle Selection
   a. Pin Diameter (inches) _____
   b. Capacity (tons) _____
   c. Shackle Attached to Load By _____

   _____
   d. Number of Shackles _____

F. CRANE

1. Type of Crane _____
2. Crane Capacity_____Tons
3. Lifting Arrangement
   a. Max Distance—Center of Load to center pin of crane_____
   b. Length of Boom _____
   c. Angle of Boom at Pick-up _____Degrees
   d. Angle of Boom at Set _____Degrees
   e. Rated Capacity of crane under severest lifting conditions (from chart)
      1. Over Rear _____lbs.
      2. Over Prong _____lbs.
      3. Over Side _____lbs.
      4. From Chart—Rated Capacity of Crane for this lift [ ]
      5. Max. Load on Crane_____
      6. Lift is [ ] of Crane's Rated Capacity

G. PRE-LIFT CHECKLIST

		YES	NO
1.	Matting Acceptable	☐	☐☐
2.	Outriggers fully extended	☐	☐☐
3.	Crane in good condition	☐	☐☐
4.	Swing Room	☐	☐☐
5.	Head Room Checked	☐	☐☐
6.	Max Counterweights used	☐	☐☐
7.	Tag Line Used	☐	☐☐
8.	Experienced Operator	☐	☐☐
9.	Experienced Flagman (Designated)	☐	☐☐
10.	Experienced Rigger	☐	☐☐
11.	Load Chart in Crane	☐	☐☐
12.	Wind Conditions _____		
13.	Crane Inspected By _____		
14.	Functional Test of Crane By_____		

MOBILE CRANE LIFTING PLAN, continued

SPECIAL INSTRUCTIONS OR RESTRICTIONS FOR CRANE, RIGGING, LIFT, ETC.

DIAGRAM CRANE AND LOAD PLACEMENT	DIAGRAM RIGGING CONFIGURATION

MULTIPLE CRANE LIFTS REQUIRE A SEPARATE LIFT PLAN FOR EACH CRANE.

ANY CHANGES IN THE CONFIGURATION OF THE CRANE, PLACEMENT, RIGGING, LIFTING SCHEME, ETC., OR CHANGES IN ANY CALCULATIONS REQUIRE THAT ANEW LIFT PLAN BE DEVELOPE

OFFICE SAFETY

PURPOSE

To establish guidelines for providing safety in both general office and project office locations.

POLICY

Office Machines

Machines should not be placed near the edge of tables or desks.
Machines that creep or vibrate during operation should be secured in a manner to prevent movement.

File Cabinets

File cabinets should be placed against walls or columns. When possible, the cabinets should be secured against tipping.
Do not overload drawers. Open only one drawer at a time to prevent the cabinet from tipping over.
Do not leave file drawers open.

Floors

All floor finishes and/or carpets should be selected for anti-slip qualities. Well maintained floors/carpets will provide protection against slips and falls.
Defective tile or carpet should be repaired immediately.

Passageways/Aisles

A minimum of four (4) feet should be established for aisles. Obstructions such as waste baskets, telephone and electrical outlets, low tables and office equipment must be kept where they do not present tripping hazards.
Stairways should be protected with anti-slip material.
Doors should not open into the path of employee travel.

Electrical

Electrically operated machines and extension cords require that outlets and extension cords be arranged to avoid tripping hazards. If extension cords are required, they must be secured and covered to eliminate tripping hazards. Extension cords shall be capable of carrying intended power loads.

Circuits providing power to office machines must be adequately sized.
Do not overload wall outlets.

Material Storage

Materials should be stored so that, in gaining access to these materials, normal office traffic does not have to be crossed.
Materials should be stored neatly so that they will not fall or cause a tripping hazard.
Flammable or hazardous liquids used in offices must be stored and dispensed from approved safety containers. Bulk storage must be in a properly constructed fireproof room or cabinet.

Lighting and Ventilation
Adequate lighting and ventilation must be provided in accordance with applicable standards.

Ladders/Stools

Ladders and stools used for reaching high storage should have either non-skid safety feet attached, or be equipped with brakes that automatically lock when weight is applied.

Fire Protection, Prevention, and Emergencies

Good housekeeping is essential in preventing fires. No open flames are allowed in the office (candles, oil lamps, etc.) as this presents a serious fire hazard.
Portable fire extinguishers must be conspicuously located and labeled. Extinguishers must be inspected and tagged annually and maintained in a fully charged condition.
Smoke detectors and/or alarm systems should be checked once a month for proper operation.

ERGONOMICS – OFFICE WORKSTATION

Chair

- Adjust the height of the chair so that the employee's feet are flat on the floor, with the knees bent at approximately 90 degrees (if the feet are not flat on the floor with the chair to the lowest position, a foot rest will be needed).
- The employee should be sitting with his/her back against the seat back to provide good lumbar support. The employee may wish to try another type of chair. Another solution may be a back support pillow to provide lumbar support.

Keyboard

- Raise or lower the keyboard surface so that the home rows of keys (ASDFGHKL) are about level with the employee's elbows. The elbows should be at approximately 90 degrees, with the wrists straight.
- The employee's hands should not be resting on the desk during typing; this may lead to bent wrists and put pressure on the tendons and nerves in the wrists. Ample space should be available in front of the keyboard to rest hands between periods of typing or for an optional wrist rest.

Mouse

- The mouse should be positioned as close as possible to the keyboard to avoid reaching or sitting with an outstretched arm.

Monitor

- Place the monitor in front of the employee.
- Raise or lower the monitor surface so the top of the monitor is at eye level. (Note: For employees wearing bifocal glasses, the monitor may need to be lowered.)
- If hardcopy documents are used during typing, the document should be placed next to the monitor, same height and same distance from the employee as the monitor. Use an appropriate document holder if necessary.

Eye Discomfort

- Brightness and contrast controls should be set at a comfortable level. If there is glare on the screen, locate the source and take measures to eliminate or reduce it. A glare screen may help as a last resort.
- Employees should move their eyes in a directions periodically throughout the day to relieve eye strain. Look into the distance periodically. Try to blink often and close eyes from time to time.

Telephone

- If the employee is required to type on a computer while speaking on the phone for the majority of the workday, the use of a headset will eliminate the need to cradle the phone between the neck and shoulder.

Work Surface Layout

- Employees need to minimize reaching. Employees should position equipment so frequently used items are within comfortable arm's reach and less used items are located further away.

OSHA INSPECTIONS

PURPOSE

To provide guidelines in the event of an inspection by a compliance officer of the Occupational Safety and health Administration (OSHA) caused by an employee complaint, accident or a scheduled general inspection.

DEFINITIONS

Compliance Safety and Health Officer (CSHO) – Designated representative of OSHA who conducts inspections.

Inspections – Inspections by OSHA are generally conducted during regular work hours.

- **Catastrophe or Fatality** – Inspections occur after the employer has notified the nearest OSHA office of any employment related fatality or accident, which results in the hospitalization of three or more employees.

- **General (including follow-up)** – Inspections are initiated by OSHA and contemplate a wall-to-wall inspection of the employer's work place.

- **Complaint (including imminent danger)** – Inspections occur as a result of OSHA receiving a complaint about a possible violation from either an employee or a representative of employees.

The scope of complaint inspections by their nature focus on a more limited area of the work place (i.e., the location of the suspected violation(s). However, under the broad authority of the Act, OSHA is likely to desire to expand such inspections into complete wall-to-wall inspections of the work place.

POLICY

Inspections are intended to serve the overall purpose of the Act, which is to make the employee's work place as safe as possible. OSHA attempts to accomplish this overall purpose during inspections by observing and citing violations of OSHA safety and health standards thereby causing the employee's work environment to be made safer and by assessing penalties and recording violations thereby encouraging employers not to violate safety and health standards.

Plummer Concrete & Associates, Inc. is committed to the remedial objectives of the Act and pursues these objectives in the highest professional manner. However, we believe the portion of the Act providing for penalties does little to further the overall remedial purpose. Therefore, the company's objective is to assert its legal rights under the Act in order to limit the scope of all OSHA inspections and exposure to penalties and records of citations

LIMITING INSPECTIONS BY AGREEMENT OR WARRANT

The scope of all types of OSHA inspections (catastrophe or fatality, general and complaint) may be effectively limited by:

- Agreement with OSHA
- Insistence on a warrant (not recommended)

The ability to limit the inspection may be exercised at any time during the course of an OSHA inspection. It is **IMPORTANT** to remember, however, that once the CSHO has completed his inspection, the company's ability to limit the inspection is gone.

CONTACT CORPORATE OFFICE

When OSHA or a state OSHA agency appears at Plummer Concrete & Associates, Inc. jobsite, Project Supervision should request that the Compliance Safety and Health Officer (CSHO) wait while your respective office is contacted for instructions. The CSHO is not entitled to start the inspection until you give the company's consent. All decisions and questions concerning the proposed inspection will be made and answered through a coordinated effort involving site personnel and corporate office. Your clear understanding of the information, procedures, and guidelines in this section is of the utmost importance in effectively responding to requested inspections by OSHA agencies.

The process by which the company may be able to limit the scope of the inspection by negotiation or the decision to require a warrant involves important considerations and a thorough analysis of all factors. Therefore, the corporate office should always be contacted when OSHA arrives on a site and prior to any decision being made to negotiate a limited scope inspection or require a warrant.

Contact Owner – Notify the owner that OSHA has requested an inspection. Recommend that a representative of the owner be present during an inspection and in all conferences with OSHA.

REQUIRING A WARRANT

If the company decides to require a warrant, OSHA would have to go to a Federal Court magistrate and request the issuance of a warrant. Current law would require OSHA to show the magistrate "reasonable cause" to believe that violations of Safety and Health Standards exist at the company's facility.

In a **GENERAL INSPECTION** request, that requirement would be satisfied if OSHA could demonstrate that the requested general inspection was the result of a broad plan developed by the Secretary of Labor to inspect certain industries for specific reasons, such as those with a high incidence of injuries and that the company's site was selected from among other facilities on some reasonable basis.

In a **COMPLAINT INSPECTION**, OSHA would be required to show specific evidence that a violation may exist at the company's site. Fairly specific testimony by an employee would satisfy a magistrate and result in a warrant being issued.

The occurrence of a **CATASTROPHE** or **FATALITY** would serve to provide a magistrate with the necessary evidence to show that a violation may exist at the company's facility.

A warrant based on a complaint, or a catastrophe/fatality would most likely be limited to the specific area(s) involved in the possible violation. A warrant issued for a general inspection may recite specific hazards peculiar to our industry that the inspection plan is designed to monitor and the reason why the company's site fits within that plan. The company should be able to insist that OSHA limit its inspection to the scope of possible violations of hazards described in a warrant.

FOCUSED INSPECTION

OSHA has determined that 90% of all construction fatalities were a result of four causes. They are:

- Falls from elevations 33%
- Struck by 22%
- Caught in/between 18%
- Electrical shock 17%

In order to qualify, the following conditions must be met:

- The project safety and health program/plan meets the requirements of 29 CFR 1926 Subpart C, General Safety and Health Provisions.
- There is a designated competent person responsible for and capable of implementing the program/plan.

As all management and supervisory personnel follow the Plummer Concrete & Associates, Inc. policy (which includes Subpart C of OSHA), they are the designated competent person(s) on the jobsite. Therefore, ALL Plummer Concrete & Associates, Inc. jobsites qualify for the focused inspections.

The Compliance Safety and Health Officer (CSHO) will then conduct an abbreviated walk around focusing on:

- Verification of the Safety and health program/plan effectiveness by interviews and observations.
- The four leading hazards listed above.
- Other ***serious*** hazards observed by the CSHO.

COMPLAINT INSPECTIONS

Under the Act, complaints are authorized only from employees or a representative of employees, who file a written complaint specifically identifying a violation or hazard alleged to exist (Exhibit I). When a CSHO attempts a COMPLAINT INSPECTION, the Project Manager and/or Project Supervision should:

1. Examine the complaint carefully.
2. Determine if the complaint lacks necessary information. It should indicate that it was received by an:
   - Employee(s)
   - Representative of employees, or
   - Other (specify)
3. Confirm that the complaint was in fact made by an employee(s) or representative of employees. If not, the company may refuse to allow the inspection.
4. Confirm that OSHA received a signed, written complaint. If not, (or OSHA refuses to confirm if they received a signed, written complaint), the company may refuse to allow the inspection.
5. If the complaint fails to specifically describe the alleged violation or hazard and its location, the company may refuse to allow the inspection.

If the complaint meets requirements 2 through 5, the company will attempt to have the CSHO agree to strictly limit the inspection to the description of the alleged violation or hazard and its location.

If the complaint fails to meet the above requirements and a decision is made to refuse to allow the inspection, make it clear to the CSHO that the company will allow an inspection if a proper complaint is presented.

GENERAL INSPECTIONS

When confronted with a request to conduct a general inspection, the Project Manager/Supervision should ask the following questions:

Describe the plan under which OSHA proposed to conduct the inspection:

Why the construction industry?

The answer should relate to a nationwide plan or program developed because of a high incidence of injuries or fatalities.

Why this Plummer Concrete & Associates, Inc.?

If there are several major job sites in the state, why this one?
If based on employee complaints, how does Plummer Concrete & Associates, Inc. compare to other area sites?

What specific hazards is OSHA concerned about in its plan to inspect the construction industry and this construction site?

The CSHO is unlikely to be able to answer these questions. Make it clear that the company will permit the inspection if OSHA is requesting the general inspection pursuant to such a plan. The CSHO may contact his/her Area Director to determine if such a plan exists and the specifics of the plan. Encourage him/her to do so.

At this point, it would be advisable to have corporate personnel talk directly to the Area Director and repeat the company's qualified refusal to permit the inspection. If possible, the agreed scope of inspection should be limited to any specific industry problem identified in such an inspection plan.

If the CSHO or Area Director refuses or is unable to answer your questions, the company may refuse to allow the inspection (after consulting with the corporate office). If a decision is made to refuse the inspection, ask whether OSHA intends to seek a warrant.

INSPECTION PROCEDURES

The OSHA CSHO, when intending to inspect a site, will normally first seek the owner, or its agent. The CSHO will present his/her credentials and state the nature and scope of the inspection. Plummer Concrete & Associates, Inc. should notify all contractors whose work area will be subject to inspection, and insist that all be provided an opening conference prior to actual inspection.

Walk around – Employee Representative
The employees on the company's site are entitled under the Act to have a representative selected by them to accompany the CSHO during the inspection. The Act also obliges the employer to pay the employee representative for time spent accompanying the inspection team (CSHO and company representatives).

It is Plummer Concrete & Associates, Inc.'s policy to restrict the paid representative to one individual. This should be made clear to the CSHO in the opening conference. If special circumstances require an additional representative of employees (without pay) he/she may participate in a limited portion of the walk around inspection. The decision to permit an additional employee representative to accompany the walk around inspection should be made only after consultation with the corporate office.

Establish Ground Rules

Before the actual physical walk around inspection begins, inform the CSHO that:

- The company will be taking notes on all facts involved in potential violations, including identification of involved employees and supervisors
- The company will be taking photographs and/or video recording.
- The company will not impede the CSHO's progress, BUT the company must be able to learn facts, names of employees, their title, and their supervisors.
- Corporate policy requires a company representative to be present when employees express a preference that a company representative be present for the interview.
- The company will expect the CSHO to inform it of suspected violations including:
  - The applicable standard.
  - What specifically is wrong?
  - The abatement procedures or measures that are necessary.

SITE INSPECTION

Take notes of everything the CSHO says relative to possible violations (what was wrong, what standard, and what should have been done). Exhibit I is provided to assist in the fact-finding procedure

Take the same photographs that are taken by the CSHO. If photographs from other angles will better illustrate the area the CSHO is concerned with, take such photographs also.

DO NOT talk about violations or safety conditions on the site in general.

> **NOTE:** The only procedure that company representative may explain is the operation of our safety program.

IN ALMOST 9 OUT OF 10 INSTANCES, it is the statements made by employer representatives trying to be cooperative that result in a citation being issued and affirmed by the OSHA court.

DO NOT demonstrate any equipment or answer any questions about equipment or operations. Simply explain to the CSHO that the company is not obligated to demonstrate equipment or explain any operations.

DO NOT correct any mistakes made by the CSHO in identifying locations on the site, type or identify of equipment, or nature of operations.

If a potential violation involves employee conduct or action (example: violation of a safety rule, unpredictable conduct, etc.), learn the identity of the employee, how long he/she was involved in the conduct, the employee's supervisor, the assignment and instructions given to the employee by his/her supervisor, and whether the supervisor knew about the employee's conduct. This information should be sought out as soon as possible, even before the CSHO completes the inspection.

When the CSHO observes a possible violation in an existing condition (example: equipment or materials improperly stored) or activity taking place over an extended period of time (minutes, hours, days), observe carefully if the CSHO determines how long the violation has been in existence or taking place. Whether or not the CSHO investigates the duration of such a possible violation, through your own investigation, determine how long the possible violation existed or was taking place and whether company supervisory personnel were aware of it or should have been aware of it.

If employees present oral complaints to the Compliance Safety Health Officer, ask the CSHO if he/she intends to take a formal written complaint. If yes, ask for a copy. If the CSHO does not take a written complaint, ask why it is being received on the basis of an informal rather than a formal complaint. Note the CSHO's answer.

Expansion of Limited Scope of Inspection. Regardless of limitations contained in a warrant or agreed on between the company and the CSHO, OSHA may properly cite any violations **within plain view**. If the CSHO locates a possible violation beyond the scope of the authorized inspection, **IT IS EXTREMELY IMPORTANT** to ask him/her how and when he/she determined that the possible violation existed. If it was not possible to know of the condition until the area outside the scope was inspected, carefully note the CSHO's answer on how he/she know of the violation. If possible, have the representative of employees confirm or admit that the possible violation was not in plain view.

CLOSING CONFERENCE

Record the conference (preferably a tape recording). If requested, advise the CSHO that he/she is free to record the conference if he/she wishes to also.

Learn as much as possible about the Compliance Safety Health Officer's background (education, training, and experience). Question the Compliance Safety Health Officer specifically about his/her personal education and training. Note any refusal to answer or evasive answers. Determine the nature of other facilities that the CSHO has inspected and whether he/she has inspected any similar types of facilities.

Ask the CSHO to go over each possible violation. Ask if he/she intends to recommend that a citation be given (remember it is not the CSHO's decision, it is likely that he/she will be asked for his/her recommendation). If the CSHO refused to state what his/her recommendation is, be sure that is noted.

DO NOT discuss possible violations or any safety problems or correct any mistakes made by the CSHO. Only ask questions that might disclose the basis and weaknesses in the ultimate OSHA conclusions about violations.

GUIDANCE FOR EMPLOYEES SUBJECTED TO THIRD PARTY INTERROGATION

After a jobsite accident, safety violation, or other similar occurrence, one or more employees may be required to submit to questioning by representatives of state or local law enforcement agencies, agencies responsible for the enforcement of safety regulations, or the owner.

Third party investigations of this sort can generally be placed into two categories:
(1) Criminal Investigations (District Attorney's or Prosecutor's Office), and
(2) Administrative Interrogation or Interview (OSHA or state equivalent).
The former are rare and occur only in the most serious cases.

In cases involving criminal investigation, contact the Corporate Insurance Department or Legal Department immediately.

In cases involving administrative interrogation or interview, ask the agency conducting the investigation whether the person being interviewed may have a company representative present during the interview. If possible, have the person interrogated accompanied by the Project Manager or his/her designee.

Contact the Corporate Legal Department; explain that corporate policy requires the presence of a corporate representative.

In cases where the company is unable or not permitted to accompany the employee during the interview, it is helpful to have guidelines to assist the employee during the interrogation. These guidelines are as follows:

- Listen carefully to the question before answering. Ask to have the question repeated, if necessary. Ask for clarification if the question is ambiguous.
- Answer the question directly and honestly. Do not volunteer any information not asked for. Answer "yes" or "no," or if narrative is required, respond briefly.
- If you do not know the answer, say so. Do not assume or speculate about facts or make conclusions in your answer.
- Do not offer your opinion or respond to hypotheticals. For example, do not state whether you think a job, a person, a piece of equipment, an activity, etc., is safe or unsafe. Do not discuss whether you would have done anything differently, whether the accident could have been prevented, etc.
- Read carefully any written statement that you are asked to sign. Require that it can be changed if it does not conform exactly to what you said or you **intended** to say.
- Ask for a copy of any written statement that you sign or that will be transcribed from the interrogator's notes or dictating machine.
- Report back to your supervisor after questioning. A record should be made of the interview, including a summary of what was said.

RECORDS

At the conclusion of the inspection, prepare a detailed report including all the matters outlined herein. On all matters identified by the CSHO to be possible violations and/or ones that the CSHO will recommend for a citation:

- Find out how long the condition or activity was in existence or taking place.
- Who created the condition or was involved in the activity? If another contractor, when did the company first learn about the condition?

- Identify any company supervisor who knew about the possible violations. If no supervisor knew about a violation, determine why, or if in your opinion supervision should have known about the possible violation.
- When employee conduct is involved which may constitute a possible violation, by sure you know the employee's identity, length of time the conduct was taking place, identity of the employee's supervisor, assignment and specific instructions, and whether the employee was known to have participated in the same act previously.
- Locate any safety memoranda or minutes of safety meetings where any of the potential violations were discussed with supervision and/or employees.
- Post OSHA Citation(s) at or near the worksite involved. Each citation, or copy thereof, must remain posted until the violation has been abated, or for three working days, whichever is longer.

The report is very important to the company's determination of whether or not to contest any citations issued by OSHA and the company's ability to develop its defenses to citations. Therefore, the Project Manager shall prepare this report after every OSHA inspection. When completed, the report should be marked **CONFIDENTIAL** and mailed to:

Safety Manager
Plummer Concrete & Associates, Inc.
PO Box 132
Ellsworth, WI 54011-0132

(EXHIBIT H)

CONSTRUCTION FOCUSED INSPECTION GUIDELINE

This guideline is to assist the professional judgment of the compliance officer to determine if there is an effective project plan, to qualify for a Focused Inspection.

	Yes/No
PROJECT SAFETY AND HEALTH COORDINATION - Are there procedures in place by the general contractor, prime contractor or other such entity to ensure that all employers provide adequate protection for their employees?	_____
Is there a DESIGNATED COMPETENT PERSON responsible for the implementation and monitoring of the project safety and health plan who is capable of identifying existing and predictable hazards and has authority to take prompt corrective measures?	_____

PROJECT SAFETY AND HEALTH PROGRAM/PLAN* that complies with 1926 Subpart C and addresses, based upon the size and complexity of the project, the following:

_____ Project Safety Analysis at initiation and at critical stages that describes the sequence, procedures and responsible individuals for safe construction.

_____ Identification of work/activities requiring planning, design, inspection or supervision by an engineer, competent person or other professional.

_____ Evaluation/monitoring of subcontractors to determine conformance with the Project Plan (The Project Plan may include, or be utilized by subcontractors).

_____ Supervisor and employee training according to the Project Plan including recognition, reporting, and avoidance of hazards and applicable standards.

_____ Procedures for controlling hazardous operations such as: cranes, scaffolding, trenches, confined spaces, hot work, explosives, hazardous materials, leading edges, etc.

_____ Documentation of: training, permits, hazard reports, inspections, uncorrected hazards, incidents and near misses.

_____ Employee involvement in hazard: analysis, prevention, avoidance, correction and reporting.

_____ Project emergency response plan.

The walk around and interviews confirmed that the Plan has been implemented, including:

_____ The four leading hazards are addressed: falls, struck by, caught in/between, electrical.

_____ Hazards are Identified and corrected with preventative measures instituted in a timely manner.

_____ Employees and supervisors are knowledgeable of the project safety and health plan, avoidance of hazards, applicable standards and their rights and responsibilities.

THE PROJECT QUALIFIED FOR A FOCUSED INSPECTION	

(EXHIBIT I)

OSHA INSPECTION REPORT

Project _____

Address _____

_____

Compliance Officer (CSHO) Information

Name _____

Office _____

Address _____

_____

Phone Number _____

Time First Appearance _____

Date _____

First Person Contacted _____

Was the compliance officer asked to wait for the corporate safety director? ☐ YES ☐ NO

Present At Opening Conference ☐ Held ☐ Not Held

Name of **Company**

_____ _____

_____ _____

_____ _____

Reason For The Inspection

- ❑ Compliant
- ❑ Referral
- ❑ Accident
- ❑ General Schedule

Walk around Attendees

Name	Company
_____	_____
_____	_____
_____	_____

Employees Interviewed

_____	_____
_____	_____
_____	_____

Alleged Violations Noted For Possible Citation (Type and Location)

1. _____

_____

_____

Witnesses _____

_____

2. _____

_____

_____

Witnesses _____

_____

3. _____

_____

_____

Witnesses _____

_____

4. _____

_____

_____

Did the CSHO take photos?	☐	Yes	☐	No
Did you take photos?	☐	Yes	☐	No
Did the CSHO take videos?	☐	Yes	☐	No
Did you take videos of the alleged violations?	☐	Yes	☐	No
Did abatement take place before OSHA left?	☐	Yes	☐	No

Completed By:

Signature **Date**

Print Name and Job Title