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**Excellence in Construction  
Committed to Our Customers**

**Commercial - Civil - Residential**



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The Management of Close Construction, Inc. wants to make clear that safety must be viewed, not only as a priority, but a Core Value, inherent in every part of our operation. Furthermore, we believe our most important asset is our employees, and nothing is more important than providing a safe and healthful environment in which to work. In carrying out this policy it is clear the only acceptable level of performance is to be "Incident Free" on all of our worksites each and every day. We believe that such performance is achievable with full commitment and diligent effort by each and every Close Construction associate.

Creation of an "Incident Free" environment within our Business requires a thorough understanding and complete acceptance of the following principals.

- Safety must be viewed as a Core Value which applies to every facet of our operation. It must be viewed as a priority.
- Safety leadership is crucial to creating an "Incident Free" Company and must exist independently of individual personalities.
- Only projects free from incidents and injuries can be expected to be consistently productive and profitable. The only truly acceptable safety performance is "Incident Free."
- Each and every employee must, regardless of position, accept and whole heartily execute their safety responsibility.
- Through proper training, planning and compliance with OSHA safety processes and practices, all accidents can be prevented.
- With proper planning and foresight, all jobsite hazards can be eliminated or guarded against before an accident occurs.

Management staff and supervisory personnel set the stage for "Incident Free" performance by their commitment to safety. Personnel in these positions must be accountable for support of the safety process and must never allow an exception to the safety rules by any one on a jobsite. Personnel in these positions shall go out of their way to acknowledge positive performance, to find potential for process improvements, to elicit feedback on the safety process, and to ensure the dignity and respect of each and every Close Construction associate. These values shall not be compromised. By enthusiastic support and implementation of this policy, an environment can be created in which all accidents can be prevented and our goal of "Incident Free" is a daily reality.

# SAFETY MANUAL

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## **SAFETY PHILOSOPHY & POLICY**

### **SAFETY PHILOSOPHY**

Our safety program is an integral part of our Company's procedures. In addition, our commitment to safety starts with upper management and involves every employee in the company.

It is our belief that "things" don't cause accidents, but that people do. We feel that every accident or injury can be avoided. Our safety program recognizes those hazards and conditions which cause accidents or injury and makes a commitment to investigate and remove accident potentials in our workplace due to human factors.

Close Construction acknowledges that the protection of human and industrial resources from accidental injury and damage is a prime responsibility of management. Losses from ill-advised practices not only adversely affect costs, they drain the resources of our company and do irreparable damage to our reputation.

No person will be asked to work at a job known to be unsafe and dangerous. One of the conditions of your employment is your willingness to cooperate in detecting, reporting and controlling dangerous situations and workplace hazards. You are required to notify your supervisor immediately of any dangerous situation which is beyond your ability or authority to correct.

Our Company has set a zero lost-time injury goal; your efforts are an important part of our reaching this objective. Only you can make a difference.

### **GENERAL SAFETY POLICY**

It is the policy of Close Construction, Inc. to provide a safe and healthful place of employment for ALL of our employees.

It is, therefore, the purpose of this stated policy to:

1. Abide by all federal, state and local regulations as they pertain to construction.
2. Apply good sense and safe practices to all jobs.
3. Exercise good judgment in the application of this policy.
4. Protect the public from any and all hazards which result from our operations.

To further these goals, the following steps shall be taken:

1. Appoint an employee as the company Safety Director with enforcement authority over safety matters.
2. Establish rules and programs, with the assistance of the Safety Director, designed to promote safety and make known to all employees the established rules and programs
3. Provide all personnel with copies of appropriate rules and regulations.
4. Make available training necessary for employees to perform their tasks safely.

5. Provide protective equipment for employees where and when required.
6. Impress upon all personnel the responsibility and accountability of each individual to maintain a safe workplace.
7. Record all instances of violations and investigate all accidents.
8. Discipline any employee disregarding this policy.
9. Reward employees when outstanding safety records are obtained.
10. Require all subcontractors as a matter of contract and all material suppliers through purchase agreement terms to follow safety rules.
11. Conduct safety inspections of all the company's jobsites, maintain records, and continually monitor the program's effectiveness.

#### CLOSE CONSTRUCTION, INC.'S PROJECT SUPERINTENDENT SAFETY DUTIES

1. Plan production so that all work will be done in compliance with established safety regulations.
2. Be completely responsible for on-the-job safety and health and secure the correction of deficiencies.
3. Make sure proper safety materials and protective devices are available and used and all equipment is in safe working order.
4. Instruct subcontractor supervisors in safety requirements.
5. Conduct jobsite safety meetings and provide employees with proper instruction on safety procedures and requirements.
6. Require conformance to safety standards from subcontractors.
7. Notify company office of safety violations.
8. Provide for the protection of the public from company operations.
9. Attempt to ensure safe performance by others on the site, including owner and architect/engineer representatives, the general public, visitors, and the employees of other contractors.

#### SUBCONTRACTOR SUPERVISORS

1. Carry out safety programs at the work level.
2. Be aware of all safety requirements and safe working practices.
3. Plan all work activities to comply with safe working practices.
4. Instruct new employees and existing employees on performing new tasks and safe working practices.
5. Install and maintain devices to protect the public from company operations.
6. Make sure protective equipment is available and used.
7. Make sure work is performed in a safe manner and no unsafe conditions or equipment are present.
8. Correct all hazards, including unsafe acts and conditions which are within the scope of your position.
9. Secure prompt medical attention for any injured employees.

#### JOB SITE WORKERS

1. Work safely in such a manner as to ensure your own safety as well as that of coworkers and others.
2. Request help when unsure about how to perform any task safely.
3. Correct un-safe acts or conditions within the scope of the immediate work.
4. Report any unsafe acts or conditions to the appropriate supervisor.

5. Report for work in good mental and physical condition to safely carry out assigned work.
6. Avail yourself of company and industry sponsored safety programs.
7. Use and maintain all safety devices provided.
8. Maintain and properly use all tools under your control.
9. Follow all safety rules.
10. Provide fellow employees help with safety requirements.

#### ALL EMPLOYEES

1. Strive to make all operations safe.
2. Maintain mental and physical health conducive to working safely.
3. Keep all work areas clean and free of debris.
4. Assess result of your actions on the entire workplace. Work should not be performed in ways that cause a hazard for others.
5. Before leaving work replace or repair safety precaution signs removed or altered. Unsafe conditions shall not be left to imperil others.
6. Abide by the safety rules and regulations of every construction site.
7. Work in strict conformance with federal, state and local regulations.

#### ARCHITECTS, ENGINEERS, OWNERS, SUPPLIERS AND VISITORS SHALL BE REQUESTED TO:

1. Inform construction site superintendent before entering a construction site.
2. Check in with the jobsite supervisor so personal protective equipment may be provided such as hard hats, eye protection and respirators, if necessary.
3. Abide by all safety rules and instructions provided by Close Construction, Inc. on site Superintendent.

#### SUBCONTRACTORS SHALL COMPLY WITH ALL OF THESE RULES

All of Close Construction's projects will be operated in strict compliance with the currently effective and applicable OSHA standards, 29 CFR parts 1926, 1910 and the General Duty Clause which addresses recognized hazards in conjunction with Close Construction's work and safety rules. In the event of conflict, the more stringent rule/standard will apply.

1. Clothing requirements are (a) shirts with sleeves, (b) work pants (no shorts), and c) OSHA approved work shoes or boots.
2. Hardhats are required to be worn on all projects, at all times.
3. Use of protective devices, i.e. eye and face protection, respirators, gloves, personal fall arrest systems, hearing protection and respiratory protection.
4. No alcohol or drug use is allowed at any time immediately before or during work hours.
5. The jobsite is to be kept clean and all debris is to be placed in the location designated by jobsite superintendent on a daily basis. Work areas will be cleaned up on an on-going basis.
6. Safety is everyone's responsibility, report violations to your supervisor or the Close Construction

Project Superintendent.

7. Report all injuries to the Superintendent.
8. Provide to Close Construction copies of Material Safety Data Sheets (MSDS) on all hazardous materials in the workplace that are being used or provided by your firm.
9. The more stringent safety rules between Close Construction and OSHA must be followed.

All of Close Construction's Work and Safety Rules, (attached) are hereto made part of this subcontract agreement in addition to the OSHA standards. Subcontractor acknowledges this fact by initialing in the designated area below.

Violations of Nos. 1 and 2 above will result in the violator being removed from the project until such time as the violation has been corrected. Failure to comply with any Safety Regulation will result in a verbal and written warning. If the violation is not corrected, the individual or company will be removed from the project indefinitely. Any loss of revenue to Close Construction due to this situation will be borne by the company violating the safety rule.

### GENERAL WORK & SAFETY RULES

All of Close Construction's projects will be operated in strict compliance with the currently effective and applicable OSHA standards: 29 CFR, Parts 1926, 1910, and the General Duty Clause which addresses recognized hazards. Close Construction recognizes OSHA standards as basic minimum requirements; therefore, some of our work rules are more stringent than those set forth by OSHA.

#### ACCESS

Use only approved ladders, scaffolding, lifts, or other approved and safe means of access to and from work areas. At no time should you jump from or to a work area, nor slide down columns, cables, ropes or guys.

#### AIR TOOLS

Install and maintain safety clips or retainers on pneumatic impact tools and hose connections to prevent accidental disconnection. All hoses exceeding ½ inch inside diameter require safety devices at the source of supply to reduce pressure in case of hose failure.

#### ATTITUDE

All employees are required to treat safety as the number one priority. As such, they are expected to report to work in good mental and physical condition to safely perform their assigned duties. Before starting any task, employees must consider the possible effects of their actions on themselves and others and take appropriate protective measures.

#### COMPRESSED AIR

Use of compressed air used for cleaning purposes shall not exceed 30 psi, and then only in conjunction with effective chip guarding and personal protective equipment. Exceptions to 30 psi are allowed only for concrete form and similar cleaning operations. Eye protection must be worn. The use of compressed air to clean off yourself and other workers is prohibited.

#### COMPRESSED GAS CYLINDERS

Put valve protection caps in place before compressed gas cylinders are transported, moved, or stored. Cylinder valves will be closed when work is finished or when work stoppage exceeds 15 minutes. When cylinders are

empty or being moved, protective caps must be in place. Oxygen and fuel gas regulators must be in proper working order while in use. Cylinders will be secured in an upright position at all times.

#### CONCRETE, CONCRETE FORMS AND SHORING

All protruding reinforcing steel, onto or into which employees could fall, must be guarded to eliminate the hazard of impalement. Wire mesh needs to be secure from recoiling.

Formwork and shoring will be designed and constructed to safely support all loads imposed during concrete placement. All components will be inspected prior to erection. Drawings or plans of jack layout, formwork, shoring, working decks and scaffolding systems will be available at the jobsite.

#### CRANES AND BACKHOES

Rated load capacities, recommended operating speeds, and special hazard warnings or instructions must be conspicuously posted on all equipment. Instructions or warnings must be visible from the operator's station.

Accessible areas within swing radius of a crane must be barricaded to prevent employees from being struck or crushed by the crane. The rear swing area of a backhoe must be kept clear of personnel who could be struck during operation.

Except where electrical distribution and transmission lines have been de-energized and visibly grounded, or where insulating barriers not a part of, or an attachment to, the equipment or machinery, have been erected to prevent physical contact with the lines, no part of a crane or its load shall be operated within ten feet of a line rated to 50 kv or below; ten feet + four inches for each kv over 50 kv for lines rated over 50 kv, or twice the length of the line insulator, but never less than ten feet. The operator will inspect cranes before each use. Any defects must be corrected before use. A fire extinguisher must be available to crane operators.

#### CRANE AND DERRICK SUSPENDED PERSONNEL PLATFORMS

Crane or derrick suspended personnel platforms may not be used unless erection, use, and dismantling of conventional means of reaching the work site would be more hazardous or not possible. Equipment used for this purpose must be tested and equipped in strict accordance with 1926.550(g).

#### DISPOSAL CHUTES

Use an enclosed chute whenever materials are dropped more than 20 feet from any elevated exterior point of a building. When debris is dropped through floor holes without a chute, the area where the material is dropped must be enclosed with barricades at least 42 inches high and not less than six feet back from the projected edges of the opening above. Warning signs shall be posted at each level.

#### DRUGS AND ALCOHOL

Use or possession of alcoholic beverages or non-prescription drugs on the jobsite is forbidden. Workers reporting under the influence of alcohol or controlled substances will not be allowed to work.

#### ELECTRICAL –GENERAL

All extension cords must be 3-wire type, protected from damage, and not fastened with staples, hung from nails, or suspended from wires. No cord or tool with a damaged ground plug may be used. Splices must have soldered wire connections with insulation equal to the cable. Worn or frayed cables shall not be used.

Bulbs on temporary lights will be equipped with guards. Temporary lights shall not be suspended by their electrical cords unless so designed

No employee may work in proximity to any electric power circuit that may be contacted during the course of work, unless protected against electric shock by de-energizing circuit and grounding it or by guarding with effective insulation. In work areas where the exact location of underground electric power lines is unknown, workers using jackhammers, bars or other hand tools, which may contact lines, must wear insulated gloves.

#### ELECTRIC – GFCI

15 and 20-ampere receptacle outlets on single-phase, 120 volt circuits for construction sites which are not a part of the permanent wiring of the building or structure, must be protected by a ground-fault circuit interrupters. GFCI's shall be tested weekly by an electrician and the results logged.

#### EQUIPMENT OPERATION

No employee will operate electric, gas or hand-powered tools or equipment unless familiar with use of the item and safety precautions required. Supervisors will provide necessary safety information for all tasks and equipment. Persons who operate powered industrial trucks such as high-lifts, rough terrain, lull type fork-lifts and similar equipment, must be trained for that equipment and provide documentation of current certification.

#### EXCAVATING AND TRENCHING

48 hours before beginning any excavating and trenching operations, a call must be made to "Call Sunshine" locating service to determine the location of all underground installations in the area. Any underground utility locations must continue to be adequately marked and supported during excavation operations. Shoring or sloping must guard walls and faces of trenches five feet or more in depth and all excavations in which employees are exposed to danger from moving ground or cave-in. This includes, but is not limited to, water in excavation, spalling, cracks from drying, nearby traffic causing vibration and previously disturbed soil. Where employees may be required to enter excavations, excavated material must be stored at least two feet from the edge of the excavation. Appoint a competent person to make daily inspections of excavations. If evidence of possible cave-in or slide is apparent, cease all work in the excavation until precautions have been taken. Trenches four feet deep or more require adequate means of exit such as ladders or steps, located in an area which requires no more than 25 feet of lateral travel. Excavations over 20 feet deep must have shoring or sloping designed by a professional engineer.

#### EYE AND FACE PROTECTION

Eye and face protection will be provided and must be worn when any operation presents potential eye or face injury. Employees involved in welding operations must wear filter lenses or plates of the proper shade and number. Welding helmets must be the type that attach to a hard hat. Goggles will be worn over any employee-owned prescription glasses that do not meet industrial safety standards when eye protection is indicated. Eye protection is required when culling, chipping or grinding concrete or steel.

#### FALL PROTECTION

The extent and type of fall protection will be determined by the classification of the structure to be built. There are only two classes of structures for the purpose of these Fall Protection rules.

- A. Residential Type Construction
- B. Other than Residential Construction.

OSHA has defined residential type construction as structures where the working environment, and the construction materials, methods, and procedures employed are essentially the same as those used for typical house (single-family dwelling) and townhouse construction. Discrete parts of a large commercial structure may

come within the scope of this directive (for example, a shingled entranceway to a mall), but such coverage does not mean that the entire structure thereby comes within the terms of this directive.

The determination as to whether a project meets the definition of residential type construction will be made during the estimation phase and will be clearly communicated to all concerned with the construction of the structure.

A. Residential Type Construction

The following fall protection rules shall apply to projects, which meet the above definition of residential type construction:

1. Foundation Walls: The contractor shall take the following steps to protect workers who are exposed to fall hazards while working from the top surface of block foundation walls and concrete foundation walls and related form work:
  - a. Only trained workers shall be allowed to work on the top of the foundation wall/formwork and only as necessary to complete the construction of the wall.
  - b. All formwork shall be adequately supported before any worker can work in top of the formwork.
  - c. When adverse weather (such as high winds, rain, snow, or sleet) is creating a hazardous condition, operations shall be suspended until such time as the hazardous condition no longer exists unless safe footing can be ensured for workers on top of the foundation wall/formwork.
  - d. Materials and equipment for the work being performed shall be conveniently located to the workers on the top of the foundation/formwork.
  - e. Materials and other objects which could pose impalement hazards shall be kept out of the area below where workers are working or they shall be properly guarded.
2. Attics and Roofs: The contractor shall take the following steps to protect workers installing drywall, insulation, HVAC systems, electrical systems (including alarms, telephone lines, and cable TV), plumbing and carpentry, who are exposed to fall hazards while working in attics or on roofs (Note: The application of singles, tile, and the other waterproofing materials is covered in Paragraph 3. i. below):
  - a. Only trained workers shall be allowed to work in attics and on roofs and only as necessary to complete the construction of the system being installed.
  - b. Materials and equipment for the work to be performed shall be located conveniently close to the workers.

- c. Materials and other objects which could pose impalement hazards shall be kept out of the area below where workers are working or they shall be properly guarded.
  - d. While attic or roof work is in progress, workers not involved in such work shall not stand or work below or adjacent to any openings in the ceiling where they could be struck by falling objects.
  - e. When adverse weather (such as high winds, rain, snow, or sleet) is creating a hazardous condition, operations shall be suspended until such time as the hazardous condition no longer exists unless safe footing can be ensured for workers on top of the roof.
3. Residential Construction Roofing work (including roofing removal, repair, and new roofing installation) where the roof slope is 8-in-12 or less and the eave to lower level fall distance is 25 feet or less.

When not using conventional fall protection systems during roofing work, the following steps shall be taken:

- a. Only workers who have been trained to be proficient in the alternative methods of fall protection used to minimize fall hazards shall be allowed onto the roof. In addition, employers shall have each affected employee trained to ensure they have specific awareness of the fall hazards associated with work on roofs with rake edges (the term "rake edges" means roof edges that are inclined such as on the gable end of a building).
- b. The employer shall have roof surfaces inspected for slipping hazards and shall either eliminate any such hazards or take effective measures to have workers avoid them.
- c. The employer shall have workers wear appropriate footwear to reduce slipping potential.
- d. When adverse weather (such as high winds, rain, snow, or sleet) is creating a hazardous condition, roofing operations shall be suspended until such time as the hazardous condition no longer exists.
- e. The employer shall have any damaged portions of the roof deck repaired as soon as practicable, and any holes (including skylight openings) or other areas where employees would not have safe footing shall be covered or surrounded by guardrails.
- f. Except as noted, employees shall be protected by a safety monitoring system, or they shall be protected by roofing slide guards (roof jacks {or equivalent supports} with minimum 2" x 6" {nominal} planks) installed in accordance with Paragraph 4 below.

NOTE: During roofing installation, the employer may use a safety monitoring system only on roofs where the slope is 4-in-12 or less, or where tile or metal roofing is being installed, the slope is 8-in-12 or less.

- g. Employers shall not allow workers to ascend or descend the roofs slope within six feet of the rake edge except where such a limit on movement would prevent the performance of work.
  - h. Supplies and materials shall not be stored within six feet of the rake edge, or three feet where tile roof systems are being installed.
  - i. The area below the eaves and rakes shall be kept clear of materials and other objects, which could pose impalement or other hazards, or they shall be properly guarded.
4. When using roofing slide guards as fall protection during the performance of roofing work, the following steps shall be taken in addition to those above.
- a. On roofs with slopes less than or equal to 6-in-12, roofing slide guards shall be installed continuously along the eave. To accomplish this, not more than three rows of roofing material shall be applied first. Then, the roof jacks or nails long enough to hold the slide guard in place should an employee slide down the roof and contact the slide guard.  
  
The angle of the slide guard system shall be approximately 90 degrees (plus or minus ten degrees) to the roof.
  - b. On roofs with slopes greater than 6-in-12 up to and including 8-in-12, eave slide guards shall be installed and additional slide guards shall be installed below the work area at intervals not to exceed eight feet. To install the slide guards, the employee, while standing on the plank below, shall secure the roof jacks with nails and then install the planks. The employee then can climb up to the plank and continue to install the roof. Although the eave slide guards must run the entire eave's length, they must be at approximately a 90 degree angle (plus or minus ten degrees) to the roof higher slide guards need only be long enough to provide protection below the area of the roof where work is being performed and may be more level, if desired. Once the roof is installed to the ridge, the employee will climb down to the lower plank and remove the planks and roof jacks from the higher level. The employee shall continue this process down the roof until all planks and roof jacks are removed. Only when the job is completed can the remaining eave planks and roof jacks be removed.
  - c. On roofs with slopes greater than 8-in-12 and on roofs with slopes greater than 4-in-12 where the eave to lower level fall distance is more than 25 feet, employers shall have workers use one of the conventional methods of fall protection (i.e., safety nets, guardrails, or personal fall arrest system).

B. Other Than Residential Construction

All other construction, which does not meet the definition of residential type construction, shall be defined as other.

The Fall Protection rules outlined below will apply to all other construction.

1. Unprotected sides and edges. Each employee on a walking/working surface (horizontal and vertical surface) with an unprotected side or edge which is six feet (1.8m) or more above a lower level shall be protected from falling by the use of guardrail systems, safety net systems, or personal fall arrest systems.
2. Leading edges. Each employee who is constructing a leading edge six feet or more above lower levels shall be protected from falling by guardrail systems, safety net systems, or personal fall arrest systems. Exception: When the employer can demonstrate that it is infeasible or creates a greater hazard to use these systems, the employer shall develop and implement a fall protection plan which meets the requirements of paragraph (K) of 1926.502 of the OSHA standards.

NOTE: There is a presumption that is feasible and will not create a greater hazard to implement at least one of the above listed fall protection systems. Accordingly, the employer has the burden of establishing that it is appropriate to implement a fall protection plan, which complies with 1926.502(k) of the OSHA standards for a particular workplace situation, in lieu of implementing any of those systems. This plan must be submitted in writing to the Close Construction's job superintendent before the work commences.

Each employee on a walking/working surface six feet or more above a lower level where leading edges are under construction, but who is not engaged in the leading edge work, shall be protected from falling by a guardrail system, safety net system, or personal fall arrest system. If a guardrail system is chosen to provide the fall protection, and a controlled access zone has already been established for leading edge work, the control line may be used in lieu of a guardrail along the edge that parallels the leading edge.

3. Roofing work on low slope roofs (4-in -12 or less). Except as otherwise provided in this section, each employee engaged in roofing activities on low slope roofs, with unprotected sides and edges six feet or more above lower levels shall be protected from falling by guardrail systems, safety net systems, personal fall arrest systems, or a combination of warning line system or warning line system and personal fall arrest system, or warning line system and safety monitoring system. Or, on roofs 50 feet or less in width, the use of a safety monitoring system alone (i.e. with out a warning line system) is permitted.
4. Steep roofs (more than 4-in-12). Each employee on a steep roof with unprotected sides and edges six feet or more above lower levels shall be protected from falling by guardrail systems with toe boards, safety net systems, or personal fall arrest systems.

## FENCING

Security fencing protects employees, the company and the general public. All fencing must be maintained by all employees to the extent of their job description. Report to your supervisor any defects beyond your ability to repair.

## FIRE PROTECTION

Fire fighting equipment must be conspicuously located and readily accessible at all times, and periodically inspected and maintained in good operating condition. Report any inoperative or missing equipment to your supervisor. Fire extinguishers rated not less than 2A will be provided for each 3,000 square feet of building area (or major fraction). Travel distance from any point to the nearest fire extinguisher may not exceed 100 feet with at least one extinguisher per floor. In multistory buildings, at least one fire extinguisher must be located adjacent to the stairway.

## FLAG PERSONNEL

When signs, signals, and barricades do not provide necessary protection on or adjacent to a highway or street, flag personnel or other appropriate traffic controls, must be used. Flag personnel will wear a red or orange warning garment. Warning garments worn at night will be of reflectorized material.

## FLAMMABLE AND COMBUSTIBLE LIQUIDS

Only approved containers and portable tanks will be used for storage and handling of flammable and combustible liquids. Locate storage areas at least 20 feet from any building and keep free from weeds, debris, and other combustible materials. Tanks containing flammable liquids must be identified as to their contents. A fire extinguisher shall be located no closer than 25 feet. No smoking signs must be posted at tank locations and other flammable material storage areas.

## HAND TOOLS

Workers will not use unsafe hand tools. Wrenches may not be used when jaws are sprung to the point slippage occurs. Keep impact tools free of mushroomed heads. Keep wooden hand tool handles free of splinters or cracks and assure a tight connection between the tool head and the handle. Electric Power operated tools will either be approved double insulated or be properly grounded.

## HARD HATS AND CLOTHING

Hard hats will be worn at all times on construction sites. Long work pants (no shorts), shirts with at least 4 inch sleeves and OSHA approved work shoes or boots are required.

## HAZARD COMMUNICATIONS

The purpose of this requirement is to ensure that the hazards of all chemicals produced or imported are evaluated, and that information concerning their hazards is transmitted to all employees. This transmittal of information is to be accomplished by means of comprehensive hazard communication programs, which are to include container labeling and other forms of warning, material safety data sheets, and employee training.

Workers will receive training on their rights, duties and responsibilities under the Hazard Communication Standard. A copy of the company's program and the standard will be made available to all employees upon request. Workers will review Material Safety Data Sheets when working with a covered material for the first time and anytime thereafter.

Each Subcontractor shall develop, implement, and maintain at the jobsite a written hazard communication program for their company. Subcontractors must provide Close Construction's Job Superintendent a copy of the above. Each Subcontractor shall ensure that each container of hazardous chemicals in the workplace is labeled, tagged, or marked with the identity of the hazard warnings appropriate for employee protection.

#### HEARING PROTECTION

Hearing protection will be worn in areas where sound levels may exceed 85 decibels.

#### HOISTS, MATERIAL AND PERSONNEL

Rated load capacities, recommended operating speeds, and special hazard warnings or instructions posted on cars and platforms may not be exceeded. Substantial full width gates or bars will protect entrances to material hoists. Hoist-way door or gates or personnel hoists will be not less than six feet six inches high, and be protected with mechanical locks which cannot be operated from the landing side and are accessible only to persons on the car. Provide overhead protective covering on the top of the joist cage or platform.

#### HORSEPLAY

All disruptive activities usually referred to as "Horseplay" is forbidden. No practical jokes or fights will be tolerated. There shall be no running on the jobsite. Throwing of tools or materials is not permitted.

#### HOUSEKEEPING

Work areas must be kept free of debris and tripping hazards as work progresses. Form and scrap lumber with protruding nails and other debris will be kept clear from work areas. Remove combustible scrap and debris as job progresses. Containers will be provided for collection and separation of all refuse at the end of each phase of work, return all tools and excess material to proper storage. Clean up all remaining debris before moving on to the next phase. All employees are responsible for keeping their work areas clean.

#### ILLUMINATION

Construction areas should be lighted to not less than minimum illumination intensities listed while work is in progress.

Foot Candles	Area of operation
Intensity-5	General construction area lighting: General construction areas, concrete placement, active storage areas, loading platforms, refueling and field maintenance areas and stairways.

#### INJURIES

All injuries, even those that appear to be slight, will be reported immediately to your supervisor or Close Construction superintendent.

#### LADDERS

Portable and fixed ladders with structural defects such as broken or missing rungs, cleats or steps, broken or split rails, or corroded components shall be withdrawn from service immediately.

- A. Portable, non-self-supporting ladders (straight and extension) shall be placed on a substantial base, have clear access at top and bottom, and be placed at an angle so the horizontal distance from the top support to the foot of the ladder is approximately one quarter the working length of the ladder. Portable ladders used for access to an upper landing surface must extend a minimum

of three feet above the landing surface, or where not practical, be provided with grab rails, and be secured against movement while in use.

- B. Job-made ladders shall be constructed for their intended use. Cleats shall be uniformly spaced not less than ten inches apart, no more than fourteen inches apart.
- C. A stepladder should never be used as a straight ladder (folded).
- D. Employees should never stand on the top platform or top step of a stepladder.
- E. Only one person may work from one ladder at a time.
- F. Never ascend, descend or work, backwards on a ladder. Always face the ladder.
- G. Never use the top half of an extension ladder for a straight ladder.
- H. Never use a ladder as a horizontal work platform.
- I. Extension ladders must have one rung overlap for each 10 feet (or fraction thereof) of working length.

#### MASONRY ACCESS ZONE

A limited access zone shall be established whenever a masonry wall is being constructed. The limited access zone shall conform to the following:

- A. The limited access zone shall be established prior to the start of construction of the wall.
- B. The limited access zone shall be equal to the height of the wall to be constructed plus four feet and shall run the entire length of the wall.
- C. The limited access zone shall be established on the side of the wall that will be un-scaffolded.
- D. The limited access zone shall be restricted to entry by employees actively engaged in constructing the wall. No other employees shall be permitted to enter the zone.
- E. The limited access zone shall remain in place until the wall is adequately supported to prevent overturning and to prevent collapse: where the height of a wall is more than eight feet the limited access zone shall remain in place until the requirements of the paragraph below have been met.
- F. All masonry walls more than eight feet in height shall be adequately braced to prevent overturning and to prevent collapse unless the wall is adequately supported so that it will not overturn or collapse. The bracing shall remain in place until permanent supporting elements of the structure are in place.

## MEDICAL SERVICES AND FIRST AID

When a medical facility is not readily accessible, a person trained to render first aid will be available at the worksite. First aid supplies must be readily available. The telephone numbers of physicians, nearest hospital or ambulance must be conspicuously posted.

## MOTOR VEHICLES AND MECHANIZED EQUIPMENT

No person shall use any motor vehicles, earthmoving, or compacting equipment having an obstructed view to the rear unless the vehicle has a reverse signal alarm distinguishable from the surrounding noise level, or vehicle is backed up only when an observer signals it is safe to do so.

## PERSONAL PROTECTIVE EQUIPMENT

The exposed person is responsible for wearing appropriate personal protective equipment in operations where there is exposure to hazardous conditions, or where need is indicated to reduce hazards. This shall include but not be limited to, eye and face protection, respiratory protection and hearing protection. Lifelines, safety harnesses and lanyards will be used only for personal safeguarding. Anyone working over or near water, where danger of drowning exists, will wear U.S. Coast Guard-approved life jackets or buoyant work vests.

## POWDER-ACTUATED TOOLS

Only trained persons will be allowed to operate powder-actuated tools. All powder actuated tools will be tested daily before use and all defects discovered before or during use will be corrected. Tools will not be loaded until immediately before use. Loaded tools will not be left unattended. Eye protection and hearing protection must be worn.

## PROTECTION OF THE PUBLIC

All personnel are charged with aiding in the protection of the public including, as your job description dictates, installation and maintenance of signs, signals, lights, fences, guardrails, ramps, temporary sidewalks, barricades, overhead protection, etc. as may be necessary.

## RAILINGS

A standard guardrail will consist of top rail, intermediate rail, toe board, and posts, and have a vertical height of approximately 42 inches from upper surface of top rail to floor, platform, etc. The top rail of a railing will be smooth-surfaced, with a strength that will withstand at least 200 pounds exerted in any direction. The intermediate rail will be approximately halfway between top rail and floor.

A stair railing will be of construction similar to a standard railing, but the vertical height will not be more than 34 inches no less than 30 inches from upper surface of top rail to surface tread in line with face of riser at forward edge of tread.

## RESPIRATORY PROTECTION

In emergencies, or when feasible engineering or administrative controls are not effective in controlling toxic substances, approved respiratory protective equipment will be provided and used. Respiratory protective devices will be approved for the hazardous material involved and extent and nature of work requirements and conditions. Persons required to use respiratory protective devices will be thoroughly trained in their use. Respiratory protective equipment will be inspected regularly and maintained in good condition.

**SAFETY NETS** Safety nets are required when work places are more than 25 feet above the surface and the use of ladders, scaffolds, catch platforms, temporary floors, safety lines, or safety belts are impractical.

## SAWS

- A. All portions of bandsaw blades will be enclosed or guarded, except for working portion of blades between bottom guide rolls and table.
- B. Portable, power-driven circular saws will be equipped with guards above and below the base plate or shoe.
- C. The lower guard will cover the saw to depth of teeth, except for minimum arc required to allow proper retraction and contact with the work, and will automatically return to covering position when blade is removed from the work.
- D. Radial saws will have an upper guard, which completely encloses upper half of the saw blade. A device that will automatically adjust to the thickness of and remain in contact with material being cut will guard the sides of lower exposed portion of blade. Radial saws used for ripping must have non-kickback fingers or dogs. Radial saws will be installed so the cutting head will return to starting position when released by operator.
- E. All swing or sliding cut-off saws will be provided with a hood that will completely enclose the upper half of the saw.
- F. Limit stops will be provided to prevent swing or sliding type cut-off saws from extending beyond the front or back edges of the table.
- G. Each swing or sliding cut-off saw will be provided with an effective device to return the saw automatically to the back of table when released at any point of its travel.
- H. Circular table saws will have a hood over the portion of the saw above the table mounted so that the hood will automatically adjust itself to the thickness of and remain in contact with the material being cut. Circular table saws will have a spreader aligned with the blade, spaced no more than 1/2 inch behind the largest blade mounted in the saw. Circular table saws used for ripping will have non-kickback fingers or dogs. Feed rolls and blades of self-feed circular saws will be protected by a hood or guard to prevent the hands of the operator from coming into contact within running rolls at any time.

## SCAFFOLDS (GENERAL)

Scaffolds will be capable of supporting four times maximum intended load and will be erected on sound, rigid footing, capable of carrying the maximum intended load without settling or displacement. Scaffold legs not resting on a concrete slab, shall be equipped with base plates, leveling jacks, if needed or mudsills. Unstable objects such as barrels, boxes, loose brick or concrete blocks shall not support scaffolds or scaffold planks. Guardrails and toe boards will be installed on all open sides and ends of platform more than ten feet above ground or floor. All scaffolds shall be fully decked if they are to be used as work platforms. Planking will be Scaffold Grade, or equivalent, as recognized by approved grading rules for the species of wood used. Overlap scaffold planking a minimum of 12 inches or secure from movement. Scaffold planks will extend over end supports not less than six inches or more than 18 inches. Scaffolding and accessories with defective parts will be immediately replaced or repaired. Multi-level scaffolds must have panels (bucks) locked together by pins or #9 wire to prevent uplift.

Access to elevated work areas including scaffolds must be accomplished with a ladder (portable or built-in). Never climb scaffold braces for access. Scaffolds will be properly braced by cross bracing or diagonal braces, or both, for securing vertical members together laterally. Cross braces will be of such length as will automatically square and align vertical members so erected scaffold is plumb, square, and rigid. All brace connections will be made secure. All braces must be in place before any worker mounts the scaffold. Guardrails approximately 42 inches high, with a mid-rails and toe boards, will be installed at all open sides and ends on scaffolds more than ten feet above ground or floor. Toe boards will be a minimum of four inches in height. "X" braces may be substituted for mid-rails or guardrails in intermediate lifts, but not both.

#### SCAFFOLDS (MOBILE)

Platforms will be tightly planked for the width of the scaffold, except for necessary entrance opening. Platforms shall be secured in place. Workers may ride mobile scaffolds when the height does not exceed twice the minimum base dimension. All four casters must be locked before work is performed. All casters must be secured to the frame with pins or #9 wire. The working platform height of a rolling scaffold must not exceed four times the smallest base dimension unless guys or outriggers are used to stabilize the tower, and increase the base dimensions.

#### SCAFFOLDS (SWINGING)

On suspension scaffolds designed for a working load of 500 pounds, no more than two persons will be permitted to work at one time. On suspension scaffolds with a working load of 750 pounds, no more than three persons may work at one time. Each employee will wear an approved safety belt or harness attached to a lifeline. The lifeline will be securely attached to substantial members of the structure (not scaffold), or to securely rigged lines, which will safely suspend employee in case of fall.

#### STAIRS

Flights of stairs having four or more risers will be equipped with standard stair railings or handrails as specified below. Stairways less than 44 inches wide with one side open must have at least one stair railing on the open side. Stairways less than 44 inches wide having both sides open must have one stair railing on each side. Stairways more than 44 inches wide but less than 88 inches wide must have one handrail on each enclosed side and one stair railing on each open side.

#### STEEL ERECTION

Steel erection activities include but is not limited to the following: hoisting, laying out, placing, connecting, welding, burning, guying, bracing, bolting, plumbing and rigging structural steel. If there is any doubt what constitutes steel erection, please contact the Close Construction's Superintendent, Project Manager or Safety Director.

- A. Commencement of Steel Erection. A steel erection contractor shall not erect steel unless it has received written notification that the concrete in the footings, piers and walls or the mortar in the masonry piers and walls has attained, on the basis of an appropriate ASTM standard test method of field-cured samples, either 75 percent of the intended minimum compressive design strength or sufficient strength to support the loads imposed during steel erection.
- B. Working Under Loads. Routes for suspended loads shall be pre-planned to ensure that no employee is required to work directly below a suspended load except for:
  1. Employees engaged in the initial connection of the steel; or

2. Employees necessary for the hooking or unhooking of the load.
  3. When working under suspended loads, the following criteria shall be met.
  4. Materials being hoisted shall be rigged to prevent unintentional displacement.
  5. Hooks with self-closing safety latches or their equivalent shall be used to prevent components from slipping out of the hook; and
  6. All loads shall be rigged by a qualified rigger
- C. Multiple lifts (Xmas Treeing) shall not be conducted without specific written permission from the Close Construction's Project Manager.
- D. Structural Steel Assembly. Structural stability shall be maintained at all times during the erection process. The following additional requirements shall apply for multi-story structures;
- E. The permanent floors shall be installed as the erection of structural members progresses, and there shall be not more than eight stories between the erection floor and the upper-most permanent floor, except where the structural integrity is maintained as a result of the design.
- F. At no time shall there be more than four floors or 48 feet (14.6m), whichever is less, of unfinished bolting or welding above the foundation or uppermost permanently secured floor, except where the structural integrity is maintained as a result of the design.
- G. A fully planked or decked floor or nets shall be maintained with two stories or 30 feet (9.1 m), whichever is less, directly under any erection work being performed. Decking Caps Around Columns. Wire mesh exterior plywood, or equivalent, shall be installed around columns where planks or metal decking do not fit tightly. The materials used must be of sufficient strength to provide fall protection for personnel and prevent objects from falling through.
- H. During the final placing of solid web structure members, the load shall not be released from the hoisting line until the members are secured with at least two bolts per connection, of the same size and strength as shown in the erection drawings, drawn up wrench-tight or the equivalent as specified by the project structural engineer of record.
- I. Each employee engaged in a steel erection activity who is on a walking/working surface with an unprotected side or edge more than 15 feet above a lower level shall be protected from fall hazards by guardrail systems, safety net systems, personal fall arrest systems, positioning device systems or fall restraint systems.
- J. Perimeter Safety Cables. One multi-story structures, perimeter safety cables shall be installed at the final interior and exterior perimeters of the floors as soon as the metal decking has been installed.
- K. Connectors and employees working in controlled decking zones shall be protected from fall hazards.

- L. Each connector shall be protected from fall hazards of more than two stories or 30 feet above a lower level, whichever is less; Have completed connector training and Be provided, at heights over 15 and up to 30 feet above a lower level, with a personal fall arrest system, positioning device system or fall restraint system and wear the equipment necessary to be able to be tied off; or be provided with other means of protection from fall hazards.
- M. Controlled Decking Zone. A controlled decking zone may be established in the area of the structure over 15 and up to 30 feet above a lower level where metal decking is initially being installed and forms the leading edge of a work area. In each CDZ, the following shall apply:
- N. Each employee working at the leading edge in a CDZ shall be protected from fall hazards of more than two stories or 30 feet, whichever is less.
- O. Access to a CDZ shall be limited to only those employees engaged in leading edge work.
- P. The boundaries of a CDZ shall be designated and clearly marked. The CDZ shall not be more than 90 feet wide and 90 feet deep from any leading edge. The CDZ shall be marked by the use of control lines or the equivalent.
- Q. Each employee working in a CDZ shall have completed CDZ training.
- R. Unsecured decking in a CDZ shall not exceed 3,000 square feet.
- S. Safety deck attachments shall be performed in the CDZ from the leading edge back to the control line and shall have at least two attachments for each metal decking panel.
- T. If the steel erection contractor is unsure of safety requirements for any phase of the steel erection process, he should consult with the Close Construction's superintendent before proceeding with the work in question.

#### STORAGE

All materials stored in tiers will be secured to prevent sliding, falling or collapse. Aisles and passageways will be kept clear and in good repair. Stored materials will not obstruct exists.

#### TOILETS

Toilets will be provided according to the following: 20 or fewer persons-one facility; 20 or more persons-one toilet seat and one urinal per 40 persons; 200 or more persons-one toilet eat and one urinal per 50 persons. Remember to provide facilities with locks for female employees.

#### WELDING, CUTTING AND HEATING

Proper precautions (isolating welding and cutting, removing fire hazards from the vicinity, providing a fire watch, etc.) for fire prevention will be taken in areas where welding or other "hot work" is being done. No welding, cutting or heating will be done where the application of flammable paints, or presence of other flammable compounds, or heavy dust concentrations, creates a fire hazard. Equip torches with anti-flashback devices. Acetylene working under pressure shall not exceed 15 lbs psi. A fire extinguisher must be close by and readily available during cutting or welding operations.

- A. Noncombustible or flameproof shields to protect employees from direct arc rays will shield arc welding and cutting operations.
- B. When electrode holders are left unattended, electrodes will be removed and holder will be placed or protected so they cannot make electrical contact. All arc welding and cutting cables will be completely insulated. There will be no repairs or splice within ten feet of electrode holder, except where splices are insulated equal to the insulation of the cable. Defective cable will be repaired or replaced.
- C. Welding rod "stubs" must not be left on the floor or working surface.
- D. Fuel gas and oxygen hose must be easily distinguishable, and not interchangeable. Inspect hoses at beginning of each shift and repair or replace if defective.
- E. Always wear approved tinted eye protection when welding. Welding hoods must be the type that attaches to a hard hat since hard hats must be worn.

#### WIRE ROPES, CHAINS, ROPES AND OTHER RIGGING EQUIPMENT

Wire ropes, chains, ropes and other rigging equipment will be inspected prior to use and as necessary during use to assure their safety. Remove defective rigging equipment from service immediately. Job or shop hooks and links, or makeshift fasteners, formed from bolts, rods, or other such attachments will not be used. When U-bolts are used for eye splices, the U-bolt will be applied so the "U" section is in contact with dead end of rope.

## SAFETY START-UP CHECKLIST

When a new project is mobilized, the following safety documents, posters, and basic equipment are required:

	Federal Labor Law 5-in-1 poster
	Worker's Compensation poster
	Required State posters
	Hard Hat signs
	"No Trespassing" signs
	3'x 6' Safety Rules banner
	Hazard Communication Program with MSDS sheets
	First Aid Kit
	Fire Extinguisher
	Emergency phone numbers posted next to phone
	Determine response time for emergency medical service
	Weekly Safety Checklist form
	Weekly Safety Meeting Report form
	"Tool Box Talks" book
	Safety Violation Notice forms
	Red Tags - " Danger!!! DO NOT USE"
	PPE -Personal Protective Equipment
	"Drug Free Workplace" sign
	Visitors hard hats
	Sufficient copies of Close Construction's Safety Manual for Subcontractor review and reference. (Copies can be downloaded from <a href="http://www.closeconstructioninc.com">www.closeconstructioninc.com</a> )
	Emergency Evacuation Plan posted & Air Horn
	OSHA Standards for the Construction Industry CFR 1926
	Excavation Safety Checklist
	Accident / Incident Report form
	Camera

## TRENCHING AND EXCAVATION SAFETY CHECKLIST

### GENERAL INSPECTION

- |     |  |     |    |     |
|-----|--|-----|----|-----|
| 1.  | Has the Competent person had training in and is knowledgeable about soil analysis, use of protective systems, and the requirements of 29CFR1926-Subpart P: Excavations and Trenches?   | Yes | No | N/A |
| 2.  | Does the “Competent person” have the authority to remove workers from the excavation immediately?  | Yes | No | N/A |
| 3.  | Are excavations, adjacent areas, and protective systems inspected by a “Competent Person: A. Daily prior to the start of work, B. As needed throughout the shift, and C. After every rainstorm or other occurrence that could increase the hazard? | Yes | No | N/A |
| 4.  | Are all surface encumbrances removed or supported?   | Yes | No | N/A |
| 5.  | Are all employees protected from loose rock or soil that could pose a hazard by falling or rolling into the excavation?  | Yes | No | N/A |
| 6.  | Are hard hats worn by all Employees?   | Yes | No | N/A |
| 7.  | Are spoils, materials, and equipment set back at least 2 feet from the edge of the excavation?   | Yes | No | N/A |
| 8.  | Are barriers provided at all remotely located excavations, wells, pits, shafts, etc.?  | Yes | No | N/A |
| 9.  | Are walkways and bridges over excavations 6 feet or more in depth and 30 inches or more in width equipped with standard guard rails and toe boards?  | Yes | No | N/A |
| 10. | Are warning vests or other highly visible clothing provided and worn by all employees exposed to vehicular traffic?  | Yes | No | N/A |
| 11. | Are employees required to stand away from vehicles being loaded or unloaded?   | Yes | No | N/A |
| 12. | Are warning systems established and used when mobile equipment is operating near the edge of an excavation?  | Yes | No | N/A |
| 13. | Are employees prohibited from going under suspended loads?   | Yes | No | N/A |
| 14. | Are employees prohibited from working on the faces sloped or benched excavations above other employees?  | Yes | No | N/A |

### UTILITIES

- |     |  |     |    |     |
|-----|--|-----|----|-----|
| 15. | Are utilities companies contacted and/or utilities located as required by local, state, and federal law? | Yes | No | N/A |
| 16. | Are the exact locations clearly marked?  | Yes | No | N/A |
| 17. | Are underground installations protected, supported, or removed when an excavation is open?               | Yes | No | N/A |

### ACCESS & EGRESS

- |     |  |     |    |     |
|-----|--|-----|----|-----|
| 18. | Are ladders or other means of access and egress in place and all trenches 4 feet or more deep?             | Yes | No | N/A |
| 19. | Are all workers within 25 feet of means of access and egress?  | Yes | No | N/A |
| 20. | Are the ladders that are used in excavations secured and extended 3 feet above the edge of the excavation? | Yes | No | N/A |

- |     |  |     |    |     |
|-----|--|-----|----|-----|
| 21. | Are all the structure ramps used by employees designed by a “competent Person”?                                | Yes | No | N/A |
| 22. | Are all structural ramps used for equipment designed by a Registered Professional Engineer?                    | Yes | No | N/A |
| 23. | Are all ramps constructed of materials of uniform thickness, cleated together, equipped with no-slip surfaces? | Yes | No | N/A |
| 24. | Are employees protected from cave-ins when entering or exiting excavation?                                     | Yes | No | N/A |

WET CONDITIONS

- |     |  |     |    |     |
|-----|--|-----|----|-----|
| 25. | Are precautions taken to protect employees from water accumulation?                              | Yes | No | N/A |
| 26. | Is water removal equipment monitored by a “competent Person”?                                    | Yes | No | N/A |
| 27. | Is surface water or runoff diverted after every rainstorm or other hazard-increasing occurrence? | Yes | No | N/A |

HAZARDOUS ATMOSPHERE

- |     |   |     |    |     |
|-----|---|-----|----|-----|
| 28. | Is the atmosphere within all excavations tested when there is reasonable possibility of an oxygen deficient, oxygen-enriched, combustible, toxic, or other harmful contaminant? | Yes | No | N/A |
| 29. | Are adequate precautions taken to protect employees from exposure to an atmosphere containing less than 19.5% oxygen and/or other hazardous atmosphere?                         | Yes | No | N/A |
| 30. | Is verification provided to protect employees from an atmosphere containing flammable gas in excess of 10% of the lower explosive limit of gas?                                 | Yes | No | N/A |
| 31. | Is emergency equipment available when hazardous atmospheres could or do exist?  | Yes | No | N/A |
| 32. | Are employees trained to use personal protective equipment and other rescue equipment?  | Yes | No | N/A |
| 33. | Are safety harnesses and lifelines used and individually attended when workers enter bell-bottom pier hole or other deep confined excavations?                                  | Yes | No | N/A |

SOILS

- |     |   |     |    |     |
|-----|---|-----|----|-----|
| 34. | Has the Competent Person classified the soil using one manual test and one visual test, as specified by the standard? | Yes | No | N/A |
|-----|---|-----|----|-----|

Visual Test \_\_\_\_\_ (Type) Manual Test \_\_\_\_\_(Type)

Soil classified as:     Solid Rock     Type A     Type B     Type C

SUPPORT SYSTEMS

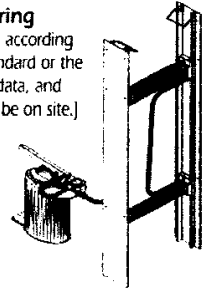
3 Primary Options are Available:

Note: If an excavation is deeper than 5feet (4 feet in some states, a support system is required by federal law, except (or excavations entirely in stable rock {very rare if an excavation is less than 5 feet deep (4 feet in some states), a support system is required if there is a potential for a cave-in, as determined by the "Competent Person."

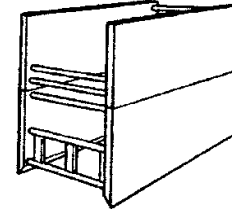
**Option #1- Sloping**  
 [For excavations less than 20 feet deep.]

SOIL TYPE	MAXIMUM ALLOWABLE SLOPE (H:V)
Stable Rock	Vertical or 90°
Type A	¾:1 or 53°
Type B	1:1 or 45°
Type C	1½ : 1 or 34°

**Option #2 - Shoring**  
 [Shoring must be installed according to charts in the OSHA standard or the manufacturer's tabulated data, and these charts or data must be on site.]



**Option #3 - Shielding**  
 [Shielding must be installed according to the manufacturer's tabulated data, and this data must be on site.]



Note: A 4<sup>th</sup> option always available is a system designed by a Registered Professional Engineer (Designs must be in writing, they must meet OSHA's requirement, and must be on site.)

- |    |  |     |    |     |
|----|--|-----|----|-----|
| 35 | Are materials and/or equipment chosen based upon soils analysis, trench depth and expected loads?  | Yes | No | N/A |
| 36 | Are materials and equipment that are used for protective systems inspected and in good condition?  | Yes | No | N/A |
| 37 | Are damaged materials and equipment immediately removed from service?  | Yes | No | N/A |
| 38 | Are damaged materials and equipment inspected by a Registered Professional Engineer after repairs are made and before bring placed back in service?  | Yes | No | N/A |
| 39 | Are protective systems installed with out exposing employees to hazards of cave-ins, collapses, or threat of being struck by materials or equipment? | Yes | No | N/A |
| 40 | Are all members of support systems securely fastened together to prevent failure?  | Yes | No | N/A |
| 41 | Are support systems provided to insure stability of adjacent structures, buildings, roadways, sidewalks, etc.?                                       | Yes | No | N/A |
| 42 | Are excavations below the level of the base or footing supported, and approved by a Registered Professional Engineer?                                | Yes | No | N/A |
| 43 | Does back-filling progress with the removal of the support system?   | Yes | No | N/A |
| 44 | Is a shield system install to prevent lateral movement?  | Yes | No | N/A |
| 45 | Are employees prohibited from remaining in a shield system during vertical movement?   | Yes | No | N/A |

Job Notes: _____	Inspected By: _____
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## WEEKLY SAFETY CHECKLIST

- Purpose:** The weekly safety checklist is designed to be a guideline and checklist for the weekly safety inspection.
- Responsibility:** Safety Director (or Superintendent) -Every Week
- Distribution:** The original report is to be submitted to the Project Manager weekly. After the Project Manager has reviewed and approved the report and taken any required corrective action, it shall be filed by job number in the project files. The Project Manager will submit any report requiring special consideration to the Safety Director.

**CONTRACTOR'S WEEKLY SAFETY INSPECTION REPORT**

Job Number: \_\_\_\_\_ Job Name: \_\_\_\_\_

Superintendent: \_\_\_\_\_ Date: \_\_\_\_\_

Person(s) Making Inspection: \_\_\_\_\_

Subcontractors On-Site (List name and trade):

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**Columns**

- A = Adequate at time of inspection
- B = Needs consideration
- C = Needs immediate attention
- N/A = Not applicable

	A	B	C	N/A	ACTION TAKEN
<b>Job Information</b>					
OSHA 300 and 301 forms posted and complete?					
OSHA poster posted?					
Phone number to nearest medical center posted?					
Tool box talks up to date?					
Work areas signed and barricaded?					

	A	B	C	N/A	ACTION TAKEN
<b>Housekeeping</b>					
Work area generally neat?					
Projecting nails removed or bent over?					
Waste containers used?					
Passageways/walkways clear?					
Cords and leads off of the floor?					
<b>Fire Prevention</b>					
Adequate fire extinguishers, checked and accessible?					
Phone number of fire department posted?					
"No Smoking" signs posted and enforced near flammables?					

**CONTRACTOR'S WEEKLY SAFETY INSPECTION REPORT**

	<b>A</b>	<b>B</b>	<b>C</b>	<b>N/A</b>	<b>ACTION TAKEN</b>
<b>Electrical</b>					
Extension cords with bare wires or missing ground prongs removed from service?					
Ground fault circuit interrupters used?					
Terminal boxes equipped with required covers?					
<b>Hand, Power, and Powder - Actuated Tools</b>					
Hand tools inspected regularly?					
Guards in place on machines?					
Tools suited for their jobs?					
Operators of powder-actuated tools licensed?					
<b>Fall Protection</b>					
Safety rails and cables secured properly?					
Employees have D-Ring of belts in center of back?					
Employees exposed to fall hazards tied off?					
Employees below protected from falling objects?					
<b>Ladders</b>					
Ladders extend at least 36 inches above the landing?					
Ladders secured to prevent slipping, sliding, or falling?					
Ladders with split or missing rungs taken out of service?					
Stepadders used in fully open position?					
No stepping at top two rungs of stepladder?					
<b>Scaffolding</b>					
All scaffolding inspected daily?					
Erected on sound rigid footing?					
Tied to structure as required?					
Guardrails, intermediate rails, toeboards, and screens in place?					
Planking sound and sturdy?					
Paper access provided?					
Employee below protected from falling objects?					

**CONTRACTOR'S WEEKLY SAFETY INSPECTION REPORT**

	<b>A</b>	<b>B</b>	<b>C</b>	<b>N/A</b>	<b>ACTION TAKEN</b>
<b>Floor and Wall Openings</b>					
All floor or deck openings planked over or barricaded?					
Perimeter protection is in place?					
Deck planks secured?					
Materials stored away from edge?					
<b>Trenches, Excavation, and Shoring</b>					
Competent person on hand?					
Excavations shored or sloped back?					
Materials stored at least two feet from trench?					
Ladders provided every 25 feet in trench?					
Equipment is a safe distance from edge of trench or excavation?					
<b>Materials Handling</b>					
Materials properly stored or stacked?					
Employees use proper lifting methods?					
Tag lines used to guide loads?					
Proper number of workers for each properation?					
<b>Welding and Burning</b>					
Gas cylinders stored upright?					
Proper seperating distance between fuels and oxygen?					
Burning / welding goggles or shields used?					
Fire extinguishers nearby?					
Hoses in good condition?					
<b>Cranes</b>					
Outriggers extended and swing radius barricade in place?					
Operators familiar with load charts?					
Hand signal charts on crane?					
Crane operators' logs up-to- date?					
Employees kept from under suspended loads?					
Chains and slings inspected and tagged as required?					



## WEEKLY SAFETY MEETING REPORT

- Purpose:** The Weekly Safety Meeting Report is designed to be an official record of safety meetings, including topics of discussion and attendees.
- Responsibility:** Superintendent -Every Week
- Distribution:** The original report is to be submitted to the Project Manager weekly. After the Project Manager has reviewed the report, it is to be filed by job number in the project files.
- Procedure:** The top portion of the report contains the job name, date of the meeting, the name of the person conducting the meeting and the topics discussed. The line item "work area or trade" shall be used on jobs where it is advantageous to have multiple safety meetings.
- The next section is for the signatures of all persons attending the safety meeting.
- The bottom section is to be used to specifically identify the date, location and possible topics of discussion for the next safety meeting.
- Note:** "Tool Box Talks" or a similar safety meeting format may be used in lieu of the attached form. All persons who attend the meeting must sign the form.



WEEKLY SAFETY  
MEETING REPORT

JOB NAME: \_\_\_\_\_

DATE: \_\_\_\_\_

WORK AREA/TRADE \_\_\_\_\_

SAFETY TOPICS DISCUSSED: \_\_\_\_\_

\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

ATTENDEES:

COMPANY NAME:

- 1. \_\_\_\_\_
- 2. \_\_\_\_\_
- 3. \_\_\_\_\_
- 4. \_\_\_\_\_
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- 14. \_\_\_\_\_

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Date of next meeting: \_\_\_\_\_

Location: \_\_\_\_\_

Possible topics to be discussed:

\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

Meeting conducted by: \_\_\_\_\_

## SAFETY VIOLATION NOTICE

- Purpose:** To record a safety violation that occurs on a Close Construction jobsite.
- Responsibility:** Safety Director or Superintendent
- Distribution:** Should violation notice be issued to a firm rather than an individual, a copy of the notice shall be forwarded to the Project Manager who will contact the firm and rectify the problem.
- Procedure:** Safety Director or Superintendent is to identify the safety violation and attempt to rectify the problem. If the violation is not corrected or is the second occurrence of such a violation, a notice will then be issued.
- Note:** There are (2) Safety Violation Forms – One for use with an Employee and one for use with a Subcontractor or Supplier.





General Construction  
Construction Management

**SAFETY HAZARD CITATION – SUBCONTRACTOR / SUPPLIER**

Date: \_\_\_\_\_

Subcontractor / Supplier Company Name: \_\_\_\_\_

Name of Person Making the Violation: \_\_\_\_\_

Location of Violation: \_\_\_\_\_

Type of Violation: \_\_\_\_\_

Corrective Action Needs to Take Place:    \_\_\_ Immediately \_\_\_ Within \_\_\_ Number of Day(s)

By signing below, the Subcontractor / Supplier acknowledges receipt of this Violation Citation and agrees to take the necessary steps to correct or eliminate said violation.

Signature of Subcontractor / Supplier Representative: \_\_\_\_\_

Supervisor / Safety Director Signature: \_\_\_\_\_ Date: \_\_\_\_\_

863.467.0831 Phone  
863.763.6337 Fax

[www.closeconstructioninc.com](http://www.closeconstructioninc.com)

301 N. W. 4<sup>th</sup> Avenue  
Okeechobee, FL 34972

## ACCIDENT INVESTIGATION

### ACCIDENT INVESTIGATION CHECKLIST

For minor injuries to Close Construction employees, call the Human Resources Department & your immediate Supervisor and complete a report of injury. An accident report can be completed over the phone. Serious injuries should be treated at the nearest medical facility. Any follow-up treatment must be by an approved medical care provider.

A drug test must be administered to Close Construction Employees within 24 hours of any accident.

Tell hospital or clinic this is a Worker's Compensation injury. Do not pay for any treatment.

The Human Resources office can be called by the medical care provider for verification of a job related injury, but only if we have been contacted first by site or project supervision.

In cases of non-Close Construction persons (Subcontractors, Vendors, etc.), allow them to seek medical care through their Worker's Compensation program.

In case of a serious accident on the job, the following must be done:

1. Care for the injured. The first concern at an accident scene, regardless of its seriousness, is care of the injured, as noted above. Nothing should interfere with this concern except the safety of the rescuers themselves.
2. Protect other people and property. The actual investigation should begin only after the accident site is safe to approach.
3. Immediately notify your Division Manager; your Project Manager; and the Safety Director.
4. Preserve the scene as it was immediately after the accident. Cordon off or barricade the area to keep curious bystanders from destroying the evidence. (See Securing the Accident Site).
5. Make a visual walk-through of the accident site Conditions at an accident scene change rapidly. As you walk through the site, take photographs to note and record locations of all items of evidence. Mark the location of any item likely to be moved, such as an injured person or a lightweight, high-value item.
6. Obtain the identities of all people who might have witnessed or possess information about the accident. If they are connected with the project, record their names, and employer's names; otherwise obtain their home address and telephone numbers.
7. Examine the evidence. Identify and examine any items that will provide information about what happened as well as how and why.
8. Make a diagram of the accident site. Sketch the accident scene and show the locations of all evidence essential to understanding the accident situation. Measure any distances involved and record them on a sketch. Information from this sketch can be used later to prepare a scaled diagram to be included in the accident report.

9. Interview and obtain statements from all witnesses. As soon as possible after the accident, interview all persons who may be able to contribute information about the accident; obtain recorded statements from them if possible.
10. Prepare an accident report. A written report must be prepared for any serious accident. This report should include details of what happened, when it happened, and who was involved. It should develop conclusions regarding the physical cause of the accident, but should attempt to place legal liability upon any party. See Close Construction Accident/Incident Report form. Use additional pages if necessary.

## REASONS FOR ACCIDENT INVESTIGATION

Investigation of serious accidents is necessary for several reasons:

1. To have a written record of what happened, how it happened, why it happened, and who was involved. For example, several third-party lawsuits involving the Construction Managers have followed this pattern: (1) a subcontractor's (or other prime contractor's) employee is seriously injured; (2) there is no investigation of the accident, since it did not involve a Company employee; (3) the injured employee collects under the employer's Workers' Compensation coverage; (4) the project closes; and (5) the injured employee files a civil suit against the Construction Manager and the owner for a substantial amount over the compensation benefits. Facts which may bear on legal liability must be documented so that the Construction Manager can defend itself successfully against such lawsuits.
2. To keep insurance premiums to an acceptable level. All facts bearing on accidents and/or injuries covered by insurance must be obtained and recorded so that the cost of claims can be kept as low as possible.
3. To detect any existing hazards or improper procedures that may cause a similar accident later.

## PUBLIC RELATIONS

1. News media release -Project personnel shall not release information to news media concerning accidents (involving either personal injury or property damage) resulting from or occurring on Close Construction jobsites. If news media personnel inquire, instruct them to contact the human resources department. Any statement to the media must be approved by the Company's legal counsel. Personal contact with relatives with news of a serious injury or death of an employee should be made. The information shall be delivered to the employee's next of kin directly by a Company representative (most likely the Project Manager), rather than by the news media. Notice provided by the Company ensures that recipients are given the latest factual information available.
2. Personal contact provides consideration of the reactions of the next of kin and will also prove beneficial in human relations with all employees. Even the brief presence of a supervisor or Company official is often very meaningful to, and appreciated by, the next of kin.
3. Insurance carrier -The insurance carrier claims adjuster should also contact the injured employee (or the next of kin in a fatality case) as soon as practical after the accident. The adjuster should explain the Workers' Compensation benefits available.

## WHO SHOULD INVESTIGATE A SERIOUS ACCIDENT

The number of persons required to complete an investigation will depend on the nature of the accident, its magnitude, and its technical complexity. The following project personnel are to be included on the investigation team;

1. Project Manager and Superintendent
2. Safety Director
3. Employee's Supervisor (if different than Superintendent/Project Manager)

## WHEN TO INVESTIGATE A SERIOUS ACCIDENT

A serious accident should be investigated immediately after its occurrence. The less time elapsed between the accident and its investigation, the more accurate the information that can be obtained. Facts are more accurate because witnesses have not had time to become biased by the opinions of others; also, their memories are clearer and they can provide more details.

When a delay occurs before an investigation, conditions at the accident scene -and the opinions of witnesses - can change rapidly. Much evidence is lost because it is removed from or altered at the accident site before it is noticed or recorded. The contact phase of an accident is brief and initiates a wide spectrum of activity. People responding to an accident generally react rather than respond; unless they are well trained, their reactions are not always rational. Injured people are moved about or removed for treatment. Equipment and items are moved about to treat the injured, provide passage, or restore operational work. Often, items are stolen as the opportunity presents itself. Prompt arrival at the scene enables the investigator to observe evidence before it has been removed or altered.

## INVESTIGATION OBJECTIVES

An accident investigation includes analysis, evaluation, and a report of an accident based on information gathered by the investigator. The quality and usefulness of the information is directly related to the thoroughness of the investigation.

It is essential to preplan investigations so that appropriate people know how and to whom to report accidents; those responsible for investigating know what to do; and equipment needed for the investigation is available when and where needed. Investigation objectives, as listed below, must be established to set the general course of direction for the investigation activities to pursue.

Locate and identify evidence relevant to the accident. Evidence will be available from:

- People involved (including injured; principals, and witnesses);
- Materials involved (including those in use, ready for use, and stored in the area);
- Environmental factors involved (including weather, light, temperature, and noise).

- 1 Examine the evidence to ascertain its impact on the accident sequence.
- 2 Reconstruct the sequence of events based on the evidence.

- 3 From the evidence, develop conclusions regarding the physical cause of the accident; however, these conclusions should attempt to place legal liability upon any party.

## REENACTING THE ACCIDENT

Often the first question asked upon arriving at an accident scene is "What happened?" Many times this simple question has resulted in the accident being repeated. While an accident reenactment can provide valuable insight and information, the process must be tightly controlled. It must be well planned and supervised to prevent repetition of a loss or the creation of an accident from a near miss. Reenactment should be used only:

- 1 When information about the actions or sequence of events cannot be obtained in any other way;
- 2 When precise step-by-step observations are needed to develop preventive action or to provide legal defense information; or
- 3 When key facts from witnesses are in conflict and need to be verified for analysis.

If reenactment is used, a positive control sequence should be followed. Persons acting out the accident should be instructed (and should repeat back the instructions) that they are not to repeat the actual last step in the sequence which led to the accident. They should first describe the steps and sequence without touching or doing anything. All actions and possible pitfalls should be explored before any actual steps are taken. The physical steps should then be followed one by one in slow motion.

A worker performing the reenactment should be emotionally fit to re-employee with the accident and should have no objection to doing so. A worker who is still in shock or who had an emotional reaction to the initial accident may not be sufficiently controllable to conduct the reenactment.

## INVESTIGATION EQUIPMENT

Several items of equipment are generally needed by the investigator. Collecting these items in a kit prepared in advance make the mechanics of the investigation easier. The basic kit of measuring, marking, and recording materials should be packaged to be readily portable even when the investigator has to walk some distance to the accident scene. Each item should be accessible without unpacking and repacking other items. A list of useful materials for an investigation kit follows:

### Recording Equipment

Camera with Flash attachment (preferably 35mm /or Digital)  
Cassette tape or digital recorder

### Administrative Items

Notebook	Containing witness statement forms, graph paper, photo logs, and company instructions.
Clipboard & Paper	For general investigation notes, sketches, calculations.
Plastic bags & envelopes	For collection of solids.

Aluminum foil	For wrapping parts to protect them from corrosion and contamination.
Paper toweling	To pad parts when wrapping, to protect fracture zones or mechanisms; also serves for cleaning parts.
Adhesive labels	To affix to wrapped parts for later identification
Chalk & yellow crayon	For marking floors, surfaces, equipment, or materials to identify positions of reference.
Orange spray paint	High visibility marking for dirt, snow, and surfaces not suited to crayon or chalk. For example, use to outline positions of parts, or to put identifying symbols on large damaged structures to be photographed.
Cardboard tags with string ties	To label small parts and items when such labeling is more suitable than adhesive labels.
<u>Tools</u>	
Flashlight	3-cell or lantern for reliable light. At least one set of spare batteries and spare bulb should be included.
Tape measure	Preferably 100ft
Scale	12-inch ruler for sketches as well as for measurement of small items, or as size reference for photographs.
Toothbrush	Natural soft bristle for cleaning metal fracture surfaces and small parts.
Nails	12d common; to mark positions in the dirt surfaces, hold end of tape.
Rope & string	To outline areas for reference and photographs, tie parts of material together for reconstruction and analysis, and to wrap parts for preservation.
Barricade Tape	To cordon off areas at the site.
Fluid sample container	Of type, material, and size appropriate for collections of fuels, lubricants, and other fluids.

## SECURING THE ACCIDENT SITE

To prevent any alteration of the scene before the investigation is completed, the site must be secured immediately after the accident occurs. The site should be maintained as nearly as possible to the way it was at the time of the accident; in this way it can be examined and preserved on film. Securing the site should also be considered if

aspects of the accident could produce an adverse reaction from the public or other employees.

The method used to secure the site will depend on the conditions and circumstances involved. Methods include:

- 1 Creating a boundary around the area using barricade tape, string, or rope.
- 2 Closing a walkway or stairway leading to the area.
- 3 Using company employees to prohibit access to the area.
- 4 Hiring security guards to watch the area and prohibit access to it.

Regardless of what methods are used, the following procedures should be followed:

- 1 Nothing should be removed from the scene without the approval of the person in charge.
- 2 All guards (company employees) should be instructed not to touch, move, or mark anything at the accident site unless asked to do so by the investigator.
- 3 An entry point should be provided to control entry and exit.
- 4 Security guards (company employees) should be provided with an authorized access list.
- 5 Security people should be closely supervised.

## RECORDING PHYSICAL EVIDENCE

An accident investigator must determine from the evidence at the scene what happened, how it happened, and why it happened. Any items which can help to answer these questions must first be identified. The meaning of certain items in certain positions at the scene may not be immediately understood; in fact, recognition of significant items and positions may not come until later in the analysis. Therefore, it is better to look for and preserve all possible clues or note their precise locations and positions after the accident; this is necessary even if some, or even most, are discarded later.

Every item found at the scene of an accident should be considered to have a bearing on the accident until proved otherwise. Some items which should be recorded by position are:

- 1 People involved, whether uninjured, injured or killed.
- 2 Machines, vehicles, and other types of equipment involved in or affected by the accident.
- 3 Parts broken off or detached from equipment and materials.
- 4 Objects which were broken, damaged, or struck during or as a result of the accident.
- 5 Gouges, scratches, dents, paint smears, rubber skid marks, or other marks on surfaces.
- 6 Tracks or similar traces of movement.
- 7 Defects or irregularities in surfaces.
- 8 Accumulations of or strains from fluids, whether existing before the accident or spilled as a result of the accident.
- 9 Spilled or contaminated materials.
- 10 Areas of debris.
- 11 Sources of distraction or adverse environmental conditions.
- 12 Safety devices and equipment.

## EXAMINING THE EVIDENCE

The gathering of parts for evidence begins after their positions are recorded. A systematic inspection of physical evidence should begin immediately after initial diagramming and photographic recording. This inspection should begin with a general survey of equipment, vehicles, and structures involved. Its purpose is to help determine whether any indication exists that component parts were missing or out of place before the accident. Also to be noted is the absence of any parts of guards, controls, or operating instruments among the damaged or remaining parts at the scene. Removal of parts for examinations may involve simply picking them up, but may also include removing attachment bolts and fittings, cutting through major structures, or even recovering them from beneath piles of debris. In any case, removal of the part must be controlled, careful, and methodical.

Normally, removal should not begin until witnesses have been interviewed, since visual reference to the accident site can stimulate memory. Removal or movement of parts should not be begun until records of their positions, measurements for diagrams, and photographs have been completed.

The following list is of certain parts which should be examined to determine if they should be removed from the accident site for analysis or perhaps subjected to a technical examination:

- 1 Components of equipment, materials, and parts of structures that are fractured, distorted, scarred, chafed, or ruptured.
- 2 Parts which are suspected of internal failure or were subjected to sudden stoppage or abnormal stress as a consequence of the accident.
- 3 Parts which are suspected of improper assembly or mating.
- 4 Parts which are suspected of having been fabricated from deficient materials or subjected to improper tempering, heat treatment, or bonding.
- 5 Parts of components which seem to be faulty in workmanship or deficient in design or which seem to have inadequate interface with other equipment and materials.
- 6 Parts improperly mounted or inadequately supported, such as lines, tubes, fittings, wiring, and controls; and which are subject to cyclical operations, vibrations or reactive movement, or pressure tension.
- 7 Parts requiring or evidencing need for lubrication or surface conditioning.
- 8 Substitute or modified component parts.
- 9 Foreign objects and parts which seem different in smell, color, shape, size, and location.
- 10 Parts which show signs of leakage.

During removal of parts for examination, take precautions to avoid defacing or distorting impact marks or fracture surfaces, or deforming the part through rough handling. Initial parts examination should be performed without altering the part or removing dirt, grease, smoke, soot, etc. If you cannot examine the point of interest without cleaning, examine the foreign matter for significance and photograph. Carefully note foreign material which evidences or indicates abuse or neglect, as well as that which shows design fault.

Cleaning a part for examination at the accident site should be done only when absolutely necessary.

Parts identified as possibly defective, damaged, or improperly assembled often must be taken from the accident site for technical examination, bench testing, or use as a legal exhibit. When such removal is necessary, document it step by step with notes and photographs. Both notes and photographs should show the part in its post-accidental final position. When improper assembly is suspected, photograph the part as each subassembly

is removed. When close-up photography is not available to show details of assembly, scribe arrows on mating parts for later assembly in their precise condition if questions arise.

Parts should be packaged and marked as they are removed. You can use cardboard tags or adhesive labels for identification. Fracture surfaces should be padded with soft cloth or absorbent paper towels to preserve the surface. Delicate parts should be padded and boxed. Both the part and the outside package should be labeled to identify the part. Greasy or dirty parts can be wrapped in aluminum foil or placed in polyethylene trash or sandwich bag for transportation to an examining shop or laboratory.

## PHOTOGRAPHS

The camera is one of the most versatile and useful tools in an accident investigation. Photographs can record what the eye misses at the scene; they can also record large amounts of detail and save the investigator time and tedious work. Minute details can be recorded and used later in the accident analysis.

When used improperly, however, the camera can destroy or distort the very evidence it seeks to preserve. Errors can be made in exposure, focus, and processing, resulting in photographs which are unusable. Photographs can also be misinterpreted, with the same result as if the camera had lied to its witness. Perhaps the most serious deficiency in use of photography is the tendency to let the camera think and see for the investigator; that is, to take large numbers of photographs at random with the hope that the key to the accident will somehow be captured in one of them.

A few of the general uses that can be made of photographs are:

- 1 Orientation of the scene of the accident.
- 2 Recording the detail of injury and damage.
- 3 Recording relative positions of large numbers of items or damage fragments.
- 4 Depiction of witnesses' views of the scene.
- 5 Evidence of improper assembly or use of equipment, materials, and structures.
- 6 Detail of marks, spills, instructional aids, signs, etc.
- 7 Records of disassembly or parts of examination.
- 8 Evidence of deterioration, abuse, and lack of proper maintenance.
- 9 Location of parts or other evidence overlooked during early stages of investigation.

Photographs of the accident scene should be taken as early as possible since evidence is subject to alteration from movement of items by investigators, theft of items, weather deterioration, erosion of marks, oxidation of fracture surfaces, and the presence of debris.

## CHOICE OF PHOTOGRAPHIC EQUIPMENT AND PRE-PLANNING

Several types of cameras are available for photographing accident sites. The most versatile and recommended camera for general investigation is the 35mm single-lens reflex. No matter which camera is used, the operator should be thoroughly familiar with the mechanics of it and with its instructional manual. Light reading, shutter speed setting, aperture setting, and focus should be practiced until the motions are second nature, and the camera feels comfortable in the hands. Practice shots should be taken of items expected to be seen during investigations, such as machines, guardrails, scaffolds, and safety harnesses. Both outdoor and indoor shots should be taken in morning, noon and night lighting, with both natural illumination and flashbulb lighting.

The types of cameras for investigation are:

35mm or Digital provides the best combination of versatility, portability, and cost for general Reflex use. It enables selective focusing to remove extraneous detail from the photograph by rendering undesired objects out of focus; permits extreme close-up photography of details without extra attachments; and allows the photographer to see light reflections, shadows and distortions just as they will appear in the photograph.

## PHOTOGRAPHING THE ACCIDENT SITE

The investigator should provide a series of photographs which supply maximum of useful information. These photographs should enable the viewer to understand how the accident occurred. Photographs should be taken of each of the following:

General view These should be taken progressively clockwise, from all four sides or major directions. General views help orient analysis of other photographs and prevent misinterpretation due to factors of camera position, lighting and shadows

Approach view Photograph the approach to the accident site if movement there was arising during examination of other photographs. A personal view from such a vantage point can also aid the investigator while "getting the big picture" of the accident. The photographer must not become endangered by climbing on an unstable structure or standing on unsafe footing to make such photographs, nor should anyone below become endangered by objects the photographer might drop or dislodge.

Overhead view Overhead views are valuable in' orientation to resolve questions arising during examination of other photographs. A personal view from such a vantage point can also aid the investigator while "getting the big picture" of the accident. The photographer must not become endangered by climbing on an unstable structure or standing on unsafe footing to make such photographs, nor should anyone below become endangered by objects the photographer might drop or dislodge.

Medium-range view Major elements in the accident site should be photographed. These will be required for later orientation to specific parts of equipment, material, and environment.

Articles of evidence As the scene is examined, various objects will appear to have direct relation to the accident. Tools, blood stains, broken parts, and similar articles should be photographed before they are moved or cleaned up. Two photographs are needed for objects less than 12 inches in length. The first should be at close range to obtain a fairly large image of the article. The use of a rule laid alongside the object will show the exact measurement of the object. The second photograph should be taken with the camera approximately six feet from the object to bring the background in view and show the object in perspective.

Weather If the accident happened outdoors and environmental factors contributed to it, photographs should be taken to show the effects of visibility restrictions, surface wetting, and weather factors. Weather is a transitory factor which changes quickly; and photographs will be more valuable than meteorological reports, since weather conditions can be highly localized.

## CAMERA POSITION AND ANGLE

The camera should be carefully placed to provide a perspective which is both normal and informative. The incorrect selection of photographic angle often results in a distorted and false impression of the scene. Remember the following points when taking photographs:

- 1 If the accident site is to be represented in a photograph as it appeared to a witness, it should be photographed with the lens at approximately the eye level of that witness. Too low a position will exaggerate obstructions and bring distant objects too close; too high a lens position will reduce the effect of obstructions and will show near objects as being at a greater distance.
- 2 When separation distance is to be shown, the photo should be taken so the objects are displayed across the photograph. Objects separated from foreground to background show separation distance only by relative size and relationship to the horizon.
- 3 Surface detail is best achieved through side lighting. When an object facing the camera has the light source at its back, the face of the object toward the camera will be in a shadow and detail will not show up appreciably; the same object with its face illuminated directly from the front by either a light from behind the camera or a flash on the camera will reflect light from its face into the camera. An object lighted directly from the front will appear flat with little detail accentuated in the face of the surface.
- 4 When bodies, equipment, or other objects have been removed from the accident scene, mark the location of the missing objects with chalk or paint.
- 5 Outline gouges, scars, skid marks, etc. to pinpoint their location using chalk or tape. Use an arrow to show movement direction if known.
- 6 Panoramic views should overlap about 50% before being pieced together.
- 7 When photographing parts that have been moved, use a background that provides contrast to the object being photographed.

## MARKING PHOTOGRAPHS

The following information should be provided on the back of each photograph. This information must be done if the photograph is to be admitted as evidence in a court case.

- 1 Photographers' signature
- 2 Date and time photograph was taken
- 3 Description of the object photographed
- 4 Camera position – facing north, south, east, or west.

If several photographs are taken, a Photo Log with entries made after each photograph is taken will facilitate marking the photographs when received from the developer.

## PROFESSIONAL PHOTOGRAPHY

Depending on the extent and circumstances of the accident, it may be advisable to hire a professional photographer. In some cases an aerial or microscopic photograph may be needed. While there is some merit to using accomplished photographers, they may not be familiar with construction work. They have been trained to think in terms of composition and aesthetic quality, not in terms of analytical use and documentation. Such photographers should be guided continually so that their actions do not destroy other evidence in the process.

## DIAGRAMS

Diagrams should be prepared if they contribute to the accident report. They should be cross-referenced in the report unless they are completely self-explanatory. Only information essential to understanding the accident situation should be included on accident diagrams. Diagrams should be accurate, well-drawn, and easy to understand. Viewers should be able to easily orient themselves and to identify locations of critical items in the drawing.

The plan view (looking down on a scene) is common. A side view should be prepared if it will assist in clarifying the situation. Persons trained in creating diagrams (surveyors, drafters, and engineers) can be of great assistance in these efforts.

By eliminating irrelevant details and adding measurements, a scene can often be sketched more clearly than photographed. The following points should be followed when sketching for diagrams:

- 1 Use square (graph) paper. Let each square represent a fixed distance such as one foot. Indicate the scale clearly on the paper.
- 2 Measurements should start from a precise point or object that can be identified at the site at a later time in other maps, drawings, or blueprints, and preferably in accident photographs as well. Precise reference points for measurements are fixed points such as numbered columns, poles, aisles, buildings, hydrants, and control boxes; or readily identifiable structures such as doorways, bridge abutments, signs, comers of walls, and fences.
- 3 Measurement of indefinite point such as impact points, areas of debris, stains, and moveable objects should be fixed by measurement from permanent objects. The positions should be fixed by triangulation, or measurement from two fixed points whose separations distance is also recorded.
- 1 Orient each sketch with an arrow pointing north.
- 2 Use a strip of the graph paper to measure diagonals on the sketch.
- 6 Locate each important object by an approximate outline.

- 7 Label large objects inside their outline. Label small objects outside their outline with an arrow to the object; the arrow should just touch the outline.
- 8 For diagrams showing great detail, use a sketch log. Use double letters to identify reference points and single letters to identify items of evidence.
- 9 Note the locations of witnesses present at the time of the accident.
- 10 If the diagram is used to orient photographs, mark the camera position by a letter or number inside a circle with an arrow. The appropriate letter or number should be on the back of each photograph.
- 11 Identify the diagram with a label or data box; this label should include the date the diagram was made and the area diagrammed. The diagram should be signed by the person who created it.

## INTERVIEWING WITNESSES

To determine all facts and circumstances surrounding an accident, interview witnesses and document information gained from them. The information obtained will be used as the basis for preventing future accidents and for defense work should a legal action arise from the accident.

Everyone who can contribute information about the accident should be interviewed. It is important to question witnesses as soon as possible, before they have time to change their observations. The longer the time span between the accident and the interview, the more details may be forgotten. Witnesses may see or hear things that revise their thinking. They may also unconsciously adjust their observations to fit what they hear from others. The longer the delay, the more opportunity people have to establish alibis or stories. Promptness in interviewing is the best solution to these problems.

Witnesses should be interviewed separately. It is usually most productive to interview the most knowledgeable of the initially-identified witnesses first. These could be the principals in the accident (those performing the activity most directly involved); key supervisors or technical experts; or primary eyewitnesses. Subsequent witnesses can then be used to fill in details or gaps and to substantiate facts and observations.

## INTERVIEW LOCATION

Interviews should be held either at the scene of the accident or in a private location. An interview at the scene of the accident is advantageous unless the extent and nature of damages, noise level, and degree of privacy will interfere with the interview. On-site interviews usually result in better recall of details, because the witness has physical reminders to stimulate memory. Positioning of relevant items and people involved can be accomplished with more accuracy than by referring to a diagram.

If interviewing at the scene is impractical or undesirable, a location free from distractions and away from other witnesses should be chosen. The interview should be held in private with the witness. It should be explained to all witnesses that separate interviews will allow each witness to relate what happened from the point of view of each witness. When conflicts in information are discovered, witnesses should be interviewed again separately. Witnesses should be interviewed in the presence of other witnesses only when necessary to resolve continued conflicts in information.

## THE INTERVIEWER

Before taking evidence from witnesses, the interviewer should survey the accident scene and environment to get the "big picture" of the accident. A brief visual orientation helps put the investigator on the same plane as the witness. Awareness of how the area appeared and what machines or materials were involved makes it easier for the investigator to absorb and rank information, to seek meaningful data from the witness, and to sift out information that seems irrelevant or in conflict with the physical facts of the accident.

Several qualifications possessed by a good interviewer are:

Good listener	All useful information will come from the witness. Hear the witness's story in full, without interruption, before asking specific questions.
Open mind	An interviewer who may have some preconceived ideas about the case must attempt to erase these notions and not jump to conclusions during the interview.
Self-control	Any loss of temper or control during the interview will cause an immediate breakdown of the interview and destroy its effectiveness.
Courteous	If the interviewer becomes antagonistic, the effectiveness of the interview will in most cases end at that point.
Thorough	When the witness has finished, the interviewer must ask questions to clarify any questionable details and obtain a more complete story.

The interviewer must assume the level of the person being interviewed. When the interviewer 'talks down' to the witness, the effectiveness of the interview may be lost.

## QUESTIONING

After the witness seems to have exhausted all self-recall, the interviewer should ask predetermined questions to

ensure accuracy of the information given and to permit subsequent evaluation of the reliability of the information supplied by the witness. These questions should include:

- 1 Time of accident;
- 2 Location of accident;
- 3 Environmental factors (light, weather, temperature, noise, etc.);
- 4 Position of people, equipment, and their relationship to pre-contact, contact and post-contact events;
- 5 Identities of other witness and their positions at the accident scenes;
- 6 Whether anything was moved, repositioned, turned on or off, or taken from the scene;
- 7 Observations related to responses of emergency teams and supervisory personnel, and their actions at the scene;
- 8 What attracted the witness's attention to the accident.

Questions should also be asked to explain unclear areas of the witness's story or to expand on certain areas in depth. When asking questions, the interviewer should:

- 1 Avoid asking leading questions (questions that indicate to the witness a desired answer);
- 2 Frame all questions in simple, non-technical terms;
- 3 Ask questions that require a narrative answer and can not be answered “yes” or “no”;
- 4 Ask only one question at a time;
- 5 Let the witness qualify answers to the questions;
- 6 Avoid showing reaction to the answers given by the witness.

## ENDING THE INTERVIEW

Notes should be taken or a recording made of each witness interview. Note taking should be unobtrusive so as not to distract the witness, but not hidden or concealed from the witness. In some cases witnesses may not talk when they realize that what they are saying is being made a matter of record; it is necessary to explain to such witnesses the purpose of the recording. Notes should record essential points of evidence, but should be neither verbatim nor so extensive that the natural pace and flow of testimony from the witness is affected. Forcing an unnatural pace of the witness could cause the witness's relation of events to become disjointed, with vital points forgotten as a consequence. A complete report should be written promptly from the notes after the interview has been completed. Impressions of and judgments by the interviewer should be included in the report rather than recorded during the actual interviews.

A tape recorder can be used for recording an interview. Sometimes, however, a tape recorder will make a witness nervous and uncomfortable. This is especially true when the witness feels that the interviewer has thrust a microphone in his face. A miniature recorder with built-in microphone is probably best for accident interviews. It can be started and then placed on a table to continue its work unobtrusively. Notes should be taken even when using a recorder.

If a recorder is used, the interviewer should make introductory and closing comments for the recording of each witness. The interviewer should also affix a label to the cassette to ensure later identification and to help prevent inadvertent erasure or over-recording. A test recording should be made before interviewing in the area; the recording should be checked periodically to determine that the background sounds do not make the testimony unintelligible. A number of factors exist which require that recordings should supplement, not replace, detailed written notes on interviews. These factors include the presence of background noise; the possibility of electronic or mechanical failure; the difficulty in locating specific parts of testimony; and the possible erasure or loss of a tape.

## WRITTEN STATEMENTS

Written statements should be obtained from all key witnesses. These can help produce a clear, detailed description of an accident and can be used in legal hearings.

Statements can be taken by a stenographer or tape recorder; written by the witness; or constructed by the interviewer from the interview. The suggested procedure is to have the witness write the statement. If more than one page is used, the witness should initial each page below the bottom line to prevent allegations that comments were added without the witness's consent. If the witness refuses to sign the statement, the

interviewer should write a comment to that effect and then sign the interviewer's own name.

If the witness cannot write, the interviewer should construct the statement from written notes in the general language of the witness. The statement should be organized with facts and points in logical order. After the statement is written, it should be read aloud to the witness, point by point. The witness should comment on each point and be given the chance to correct any point. Any changes should be indicated by crossing out incorrect words and writing the correct words above them. The witness should initial or mark the end of the statement and beside each change made.

## ACCIDENT REPORTS

A Close Construction's incident/accident report form must be completed for all accidents, incidents, and near misses and sent to the safety director immediately.

A separate written report should be completed for all serious accidents. The report should be completed by the person or persons who investigate the accident and should be completed as soon as possible after the investigation is completed. The report should contain the following:

1. Detailed description of the accident including answers to the following:
  - a. What injuries and/or property damage resulted?
  - b. What happened?
  - c. Who (individuals and companies) was involved?
  - d. When did the accident occur?
2. List of who was notified (owner, insurance company, OSHA, etc.) and when each was notified;
3. List of who was investigated at the accident (Owner, insurance company, OSHA, etc.);
4. Photographs taken;
5. Diagrams made;
6. Witnesses' statements;
7. Contract documents involved (rental agreement, hold harmless clause, etc.);
8. Conclusions should be developed regarding the physical cause of the accident, but should not attempt to place legal liability upon any party.

A copy of the completed report should be sent to the Corporate Safety Director and a copy kept in the project file. No part of the report should be shown or given to any party, including an injured employee, unless approved by the Corporate Office.



ACCIDENT/INCIDENT REPORT FORM

JOB NAME \_\_\_\_\_ JOB # \_\_\_\_\_ DATE \_\_\_\_\_

- 1. Date and time of occurrence \_\_\_\_\_
- Name of contractor(s) involved \_\_\_\_\_
- Name(s) of person(s) involved \_\_\_\_\_
- Name(s) of witness(s) \_\_\_\_\_
- Witness(s) phone number(s) \_\_\_\_\_
- Equipment involved \_\_\_\_\_

2. Describe in detail what happened:

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

3. Accident/Incident result in: (check all that apply)
- Near Miss       Equipment Damage       Fire-Explosion
- Other       Personal Injury
- Name of injured & describe injury \_\_\_\_\_
- \_\_\_\_\_
- \_\_\_\_\_

4. Primary cause: \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_
5. Secondary or contributing factors: \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_
6. Describe immediate corrective action taken \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_
7. Describe future action taken/recommended to prevent reoccurrence \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_
8. Indicate any other pertinent information with regard to this incident or accident: \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

\_\_\_\_\_  
Signature

\_\_\_\_\_  
Title

\_\_\_\_\_  
Date

## OSHA INSPECTIONS

### GENERAL

The Occupational Safety and Health Act (OSHA) was enacted in 1970, with its purpose being to assure so far as possible every man and woman in the nation safe and healthful working conditions and to preserve our human resources." The management of Close Construction is in complete agreement with the purpose of the Act and expects each project to comply with all regulations of the Act.

Administration and enforcement of OSHA are vested in the Secretary of Labor and the Occupational Safety and Health Review Commission. The Act is enforced by jobsite inspections by OSHA compliance officers to determine if the regulations provided by the Act are being complied with by employers. Violations of the Act as determined by the compliance officers during their inspections will result in financial penalties, up to \$70,000 per violation. The Company accepts the enforcement procedures as provided by the Act. The Company also realizes that if certain procedures are followed by the projects before, during, and after inspections, the results of the inspections will be much more favorable to the Company. For this reason the Company has established the following procedures to be followed during an OSHA inspection.

### UPON ARRIVAL OF A COMPLIANCE OFFICER

- 1 Verify each compliance officer's credentials. Ensure that the credentials are current. Obtain a business card from each compliance officer or record the name, address, and telephone number of each.
- 2 Determine the reason for the inspection. This will help in making the decision as to whether or not to require a search warrant.
- 3 If the inspection is the result of an employee complaint, ask for a copy of the complaint.
- 4 Call the Corporate Office immediately and inform an Officer of the Company to make the decision to allow access. Call the Safety Director
- 5 Notify all project supervisors that the project is about to be inspected and the reasons for the inspection.
- 6 Request an opening conference, if the compliance officer does not call for one.

### AT THE OPENING CONFERENCE

- 1 Have the project manager, Project Superintendent, and/or Safety Director present if possible.
- 2 Take detailed notes of everything discussed.
- 3 If the inspection will disrupt an important meeting or critical phase of work, explain this to the compliance officer and arrange for the inspection to take place at a later time and date.
- 4 Keep all publications and documents given to you by compliance officers. Note on each the name of the compliance officer who gave it to you and the date you received it.
- 5 Determine each compliance officer's length of time with OSHA, education, prior work experience, and knowledge of construction work.
- 6 If more than one compliance officer is involved, find out if their intent is to conduct the inspection in one group or to split into two or more groups. If their intent is to divide into groups, determine if it will present a problem for a qualified employer representative for each group. If it is not feasible to provide an employer representative for each group, discuss this with

- the compliance officer. If they still insist on dividing into groups, tell the Corporate Safety Director.
- 7 If the project involves many contractors, try to reach an agreement with the compliance officer that the inspection will only last a short time. The intent of this effort is that the company not become involved in a prolonged investigation while the compliance officer investigates the company and every contractor on the project at the same time. (Some OSHA inspections of construction projects have lasted more than a week).
  - 8 Be cooperative with the compliance officer. At all times before, during, and after the inspection. All company employees should act in a professional, businesslike manner. Never enter into personal arguments with the compliance officer.

## COMPANY RECORDS

- 1 Allow the compliance officer only to look at the OSHA records the company is required to keep – OSHA 300A Form, Crane inspection records, etc. Do not give copies of these or any other records to the compliance officer.
- 2 Do not allow any compliance officer to have a copy of any company safety manual.
- 3 Do not allow any compliance officer to have a copy of any safety inspection reports made by the company safety personnel, insurance carrier, etc., other than those reports required by OSHA. Also, do not allow any compliance officer access to any such reports the company may have which relate to subcontractor's activities.

## DURING OSHA INSPECTION

- 1 Have the Designated Company Representative, and/or Safety Director accompany the compliance officer at all times. Never allow the compliance officer free, unaccompanied access to any area of the project.
- 2 Control the inspection. Treat all compliance officers as you would guests in your home; they are there with the Company's permission and will be expected to follow all instructions. They will be required to conduct the inspection in a manner that does not disrupt the scheduled work. Remember, it is the Company's construction project -not OSHA's. The compliance officer is to be treated as any other visitor -under the Company's control while on our project.
- 3 Take detailed notes of everything each compliance officer sees, does, and discusses.
- 4 Photograph everything the compliance officer photographs. If you can photograph the equipment, work area, etc. from a more favorable position (different angle, greater distance, etc.), then do so.
- 5 Do not allow any employee to perform demonstrations for the compliance officer. For example, if a truck is idle and the compliance officer asks you or a worker to operate it to determine if the horn or backup alarm is working, refuse to do it. Allow the compliance officer to see the work as it is normally being done only.
- 6 Answer the compliance officer's questions to the best of your knowledge, but do not offer more information than is requested. Do not offer any evidence against yourself.
- 7 Do not issue orders such as "clean up that trash" during the inspection to correct a condition that the compliance officer may not have noticed. The immediate correction of an alleged violation will not prevent its being cited by the compliance officer, and may in fact call the compliance officer's attention to the situation.
- 8 Ensure that you fully understand everything the compliance officer does or says. If you do

not understand something completely, ask appropriate questions. Insist on being allowed the time to record all information, even if the inspection is slowed.

#### ALLEGED VIOLATIONS

- 1 For each alleged violation pointed out by the compliance officer, determine the exact details of ownership, control, installation, and/or actual Company exposure to the alleged unsafe condition.
- 2 Never admit that an alleged safety hazard is a violation of the OSHA standards. Such a determination will be made only after a thorough investigation of the conditions involved and after the Corporate Safety Director has cited the standard.
- 3 Determine the compliance officer's background and experience in the subject matter covered by each alleged violation mentioned.
- 4 Ask the compliance officer how to correct each alleged violation mentioned.

#### AT THE CLOSING

- 1 Have either the Project Manager, Project Superintendent, Job Superintendent and/or the Safety Director present.
- 2 Take notes of everything discussed, and record what documents were distributed by the compliance officer.
- 3 Ensure that none of your questions concerning the inspection go unanswered. If compliance officers believe that violations exist on the project, find out exactly the reasons for their beliefs. Discuss with them the abatement dates they plan to submit for each condition. If a condition can not be corrected within the abatement date, discuss this with the compliance officer.
- 4 Do not give any estimate of any abatement time needed to correct any alleged violation.

#### AFTER THE INSPECTION

- 1 Call the Corporate Safety Director to discuss the preliminary results of the inspection.
- 2 Immediately send the Corporate Safety Director copies of all notes and photographs taken.

#### UPON RECEIVING AN OSHA CITATION

- 1 Notify the Corporate Safety Director immediately. This is extremely important, since there is only a limited amount of time to make a decision as how to best handle the citation.
- 2 Post a copy of the citation(s) as OSHA requires.

## SUBCONTRACTOR SAFETY PERFORMANCE

Safety shall be discussed and emphasized with each subcontractor prior to and in connection with the award of any subcontract. Each subcontractor shall specifically acknowledge its responsibility and commitment to maintaining safe working conditions and compliance with applicable regulations including the Close Construction work and safety rules which are part of their contract.

Please note that since the Close Construction work rules and OSHA regulations are a part of our contract. Subcontractors will not be allowed to work until a signed contract is on file along with proof of current Worker's Compensation and General Liability coverage.

### Meetings with Subcontractors

In addition to the weekly jobsite safety meeting, periodic meetings will be held to discuss the following:

- 1 A review of job operations in progress noting specific safety problems which must be corrected.
- 2 Safety items discussed in connection with future operations. Specific hazard exposures shall be identified and methods of control shall be agreed to.

### Subcontractor Operations

The operations of each subcontractor shall be inspected for safety by Close Construction's jobsite superintendent at least once a week. In addition, an inspection shall be made immediately after a subcontractor begins operations in a new area of the project. A written report will be made if there are any safety violations or problems and the contents of the report shall be noted in the superintendent's daily report. Should there be no violations or problems that fact shall also be noted in the superintendent's daily report.

### Correcting Subcontractor Identified Hazards

Whenever hazards are noted with regard to subcontractor's operation, whether through inspections conducted by Close Construction or outside persons, (such as our insurance company's representative or State or Federal inspectors) the following procedures shall apply:

- 1 The superintendent will give notice in writing to the subcontractor's field supervisor, with a copy to his office, which will specify the corrective action required and the time by which it must be accomplished. An appropriate way to communicating this is with a Safety Violation Notice. For conditions which may have been corrected pursuant to previous oral instructions, the notice should indicate that the correction has been made and express the expectation that such conditions will not be allowed to exist in the future. A copy will be kept in the appropriate subcontractor file.
- 2 In the event the subcontractor contends that the condition or work practice cannot be improved due to the type of systems or procedures necessary to accomplish the work, the superintendent and/or Project Manager will review the matter with the Safety Director and/or Division Manager. After exploring all options, it will then be determined what further action, if any, should be taken.

- 3 If the subcontractor's field supervisor does not respond in a satisfactory manner, the Project Manager shall correspond to an appropriate person in the subcontractor's organization to advise them of the need to immediately respond to the safety problem and expressing concern over the lack of cooperation from their field supervisor. In cases involving potentially serious circumstances, a copy of this letter should be sent to the subcontractor's insurance carrier.
  
- 4 In the event the subcontractor continues to be unresponsive, options to be considered should include:
  - a. Involving the Division Manager and/or Director of Operations in communications with the top level subcontractor's organization.
  - b. Performing corrective work for the subcontractor and back charging.
  - c. Direct correspondence with the subcontractor's insurance carrier.
  - d. Withholding of progress payments until satisfactory conditions are achieved.
  - e. Termination of Subcontractor's contract.

## JOBSITE EMERGENCY RESPONSE PROCEDURES

### MINOR FIRST AID

1. Minor jobsite first aid shall be administered at the project level by personnel with prior first aid training.
2. Immediate attention should always be given to anyone seeking first aid assistance.
3. Persons administering first aid shall wear protective gloves and eye protection during the entire first aid process.
4. Analyze how the accident occurred, and log it in on the project daily log.
5. If the injury is more than you can handle, seek additional help. If none is available, transport the injured person to a medical care provider immediately.
6. First aid supplies shall be readily available on all projects and shall be kept fully stocked to permit treatment of most first aid situations.

### EMERGENCY RESPONSE

1. When an emergency situation arises on the project site, the first person on the scene with a radio shall immediately break onto the project's radio frequency and state calmly that an emergency situation exists and that everyone should avoid using the radio until their assistance is called upon.
2. The person with a radio should then contact the project office and state what type of emergency response is required, and the name of the person (if applicable) involved in the emergency. An example would be: "We have a worker, John Doe, injured on the east side of Building 1. Nature of the injury; employee fell from 10 feet. Appears to have broken leg. Contact 911 for assistance."
3. Office personnel shall relay to 911 operator the type of emergency, the address, phone number, and any other information that may be required. Also, state that someone will be on site to direct them to the emergency.
4. Project management will immediately report to the accident scene to begin gathering witness statements and information regarding the emergency. (Refer to Accident Investigation). Remember always to care for any injured person first.
5. Project management will report to the project scene with both 35mm and Digital type cameras to coordinate the accident investigation. Project management will lead the investigation and will issue the final report.

6. Project management shall appoint someone to wait for emergency vehicles at the project gate or access area. This person shall be responsible for directing the emergency response vehicles to the accident.
7. Each craft supervisor is responsible for ensuring that all craft personnel stay away from the accident scene unless directly involved in the accident or the investigation.
8. Project management will contact the Safety Director to report the accident and preliminary details so that appropriate Company officials can be advised.

## THUNDERSTORM SAFETY PROCEDURE

### PURPOSE

To set forth precautions and procedures to minimize effects of thunderstorms and accompanying hazards. Thunderstorms occur in most areas of the country and pose a threat to workers and equipment.

### GENERAL

Heavy rain, hail, lightning, high winds, and tornadoes may accompany thunderstorms. For these reasons thunderstorms can be very destructive. Since thunderstorms are difficult to foresee, it is important that workers be educated in the safety precautions to take in the event one occurs.

Workers shall seek shelter indoors during a thunderstorm when possible. When indoors, it is important to avoid contact with electrical appliances and conductive surfaces and structures.

Workers who are outdoors shall remain lower than the nearest highly conductive object. Lightning will strike the easiest source to ground, not necessarily the tallest object. Conductive objects such as trees, telephone poles, crane booms, and flagpoles shall be avoided. Maintaining a distance from a conductive object of twice the object's height is usually safe. The most dangerous aspect of a thunderstorm is lightning.

Objects which could carry electrical current from a remote thunderstorm shall also be avoided. These objects include telephone lines, pipelines, and fences. Workers shall not use electric tools outdoors when a thunderstorm is in the immediate area.

Rain accompanying a thunderstorm may create flooding conditions. National Weather Service advisories shall be monitored for flash flooding warnings. Workers shall be instructed to avoid flood plains, drainage ditches, and dry creek beds when flash flood warning is issued.

Workers must take certain precautions while driving during thunderstorms. When poor visibility is encountered, the driver shall stop the vehicle until visibility improves. When lightning is in the immediate area, the worker should seek shelter indoors or remain in the vehicle away from interior metal parts. When high winds or flooding accompany thunderstorm, the worker shall seek an appropriate protected area.

Workers are not allowed to work cranes during a thunderstorm. Cranes shall be grounded to prevent damage or injury. If a crane is located on a barge or other vessel, the crane shall be adequately bonded. The crane's boom shall be lowered when winds exceed approximately 30 miles per hour. Barges and other vessels shall be secured to a stationary object.

## TORNADO SAFETY PROCEDURE

### PURPOSE

To provide guidelines for protecting workers from, and preparing projects for, tornadoes. Tornadoes are violent storms of short duration which occur during all seasons and in all 50 states.

### GENERAL

A tornado watch is issued by the National Weather Service when conditions are right for formation of tornadoes in or near the area. When a tornado watch is issued, the Senior Construction Project Representative shall appoint an individual to monitor the Weather Service advisories. A tornado warning is issued when a tornado has actually been sighted. The tornado warning will state where the tornado was sighted, where the tornado is expected to move, and when it is expected to affect the area being warned.

When a tornado warning is issued, emergency precautions shall be taken immediately. An emergency alarm shall be sounded, and all workers shall move to designated emergency shelters. The predetermined shelters should be located in a reinforced building, the basement of a building, an inner hallway on a lower floor, or a similar location which is away from windows. Large rooms with wide, free-span roofs shall not be used.

Battery-powered radios shall be available in the event of a power failure. During the tornado alert, weather information shall be monitored for further advisories.

A thorough inspection of the project shall be made after a tornado has struck. The inspection team, appointed by the Superintendent, shall aid in emergency rescue and repairs and shall assess damage. This team shall report its findings to the Senior Construction Project Representative promptly.

## HURRICANE SAFETY

### PURPOSE

To provide guidelines for planning emergency procedures should a hurricane watch be issued. Such procedures shall be closely followed for the safety of personnel and reduction of damage the hurricane may produce.

### GENERAL

A hurricane is a large storm accompanied by heavy rains and sustained winds of 74 mph or more. The path of destruction can be as wide as 500 miles. The hurricane season begins June 1 and ends November 30 in the northern hemisphere.

Upon receipt of hurricane warnings, the Senior Construction Project Representative shall designate an individual who shall be responsible for monitoring the path of the storm through National Weather Service advisories. The location of the eye, or storm center, should be determined as accurately as possible. Should the eye pass over the project, the relative calm is soon violently shattered by sudden high winds from the opposite direction.

If evacuation is necessary, instructions of local authorities shall be followed.

To protect the project against the destructive winds employed with hurricanes, the following preparations are needed:

1. All loose material shall be securely anchored or stored before the storm arrives. Special attention shall be paid to flat, light, and empty containers.
2. Windows which may be affected shall be taped or boarded. Larger windows may be broken by high winds, while smaller windows may be broken by windblown objects.
3. All unfinished masonry walls and forms for concrete walls shall be additionally braced.
4. Tarpaulins and temporary covers shall be checked to see if waterproof and tightly secured.
5. Light siding shall be secured.
6. All small buildings shall be tied down to deadman or similarly anchored. These include such buildings as trailers, portable toilets, and craft shanties.
7. Roofs shall be made as clear as possible. Items not completely installed, such as vents, chimneys, and heating and ventilating ducts, shall be secured.
8. Openings or ducts from fans, ventilators, and air conditioners shall be mechanically closed.
9. Small, lightweight equipment shall be placed in warehouses or buildings, or weighted down.
10. Scaffolds shall be taken down or adequately secured.

To protect the site from heavy driving rains and floodwaters, the following preparations shall be made:

1. Equipment shall be placed on high ground or where it will be least affected.
2. Entrances and openings subject to flooding shall be protected with sandbags or sand dikes.
3. All stationary exterior equipment necessary for continuous site operation shall be protected with tarpaulins and/or sandbags or by similar means.
4. Emergency procedures for electrical shutdown shall parallel normal shutdown procedures.

5. Office equipment, files, records, and other important items shall be placed above expected flood level.
6. Tanks of flammable, caustic, acidic, gaseous, or corrosive materials which may float off their foundations shall be secured. Welding gas lines should be valved off at the source.

To prepare the project for an emergency such as a hurricane, certain basic emergency supplies shall be kept available. These supplies include sand, sandbags, tarpaulins, lumber, plywood, heavy rope, and emergency generators. Battery-operated radios and lights shall be kept on hand. These radios may provide the only means of contact with the outside world should there be an electrical failure.

A severe hurricane may disrupt normal operations in the area of the jobsite. An adequate supply of fresh drinking water and gasoline shall be stored on the project in case such items are not immediately available after the storm.

**USE OF CLOSE CONSTRUCTION'S HURRICANE CHECKLIST IS REQUIRED.** (There is one for the main office as well as one for use on the job site(s).)

## HURRICANE PREPARATION CHECKLIST (OFFICE)

### **Prior to a Hurricane Prediction**

#### **Office Manager:**

- Periodically review our insurance policies to be sure all necessary coverage is provided at a replacement value and includes loss of business coverage.

#### **H.R. Manager:**

- Develop a "telephone tree" with important numbers and develop a contingency plan to operate out of another site, if needed. Establish a contact point out of the area, so employees and subcontractors can keep in touch. Don't depend on your cell phone; use the phone of a friend, relative or other friend outside your area for contact. Make sure customers know how to reach us.

### **Hurricane Conditions Predicted within Five Days**

#### **H. R. Manager:**

- Make sure all employees are aware of important phone numbers and our contingency plan.
- Maintain at least a week's supply of printer cartridges and paper

#### **All Office Support Staff**

- Assist Superintendents in contacting subcontractors and outline expectations for securing job sites, explain contingency plan, and give them phone numbers where they can reach us.

### **Hurricane Watch is Issued** *[Issued when a hurricane is 3 days out – hurricane conditions (winds of 74 mph or greater) may threaten your area within 36 hours]*

#### **Labor Foreman / Safety Director**

- Close and cover all windows of our office with plywood.
- Close hurricane shutters or hang plywood over windows for Chris' Mom's house, Linda's house, Chris' house, any other homes specified by Chris.
- Make sure there is an adequate supply of gas for generators.
- Plan for the next day as if a Hurricane Warning will be issued, make sure there is enough time to complete the tasks necessary for a Hurricane Warning.

### **Hurricane Warning is Issued** *[Issued when a hurricane is 1 day away - sustained winds of 74 mph or higher are expected in your area within 24 hours]*

#### **All Office Employees:**

- Back up all individual computers on the server
- Unplug and secure all computers and associated equipment above floor level in the event of flooding
- If authorities call for evacuation, all employees are to leave immediately

#### **Office Manager:**

- Back up server and remove back up to a secure location
- Make sure the office is secure

#### **H. R. Manager:**

- Secure adequate cash to operate for several days.

### **After a Hurricane Has Passed**

#### **All Employees:**

- contact the office in person or by telephone as soon as (cell or land line) service is available so we know everyone is ok. (863) 467-0831 office or the Safety Director (863) 634-4260.

#### **Safety Director:**

- Set up generators for office usage

**HURRICANE PREPARATION CHECKLIST  
(JOBSITE)**

**Hurricane Conditions Predicted within Five Days**

- Clean job site daily
- Inspect and secure tie-downs for all construction trailers and temporary construction
- Reschedule material deliveries that have little impact on your production
- Make sure your staff is aware of important phone numbers and your contingency plan
- Contact your subcontractors and outline your expectations for securing job sites, explain your contingency plan, and give them phone numbers where they can reach you
- Make sure your vehicle has flashlight and drinking water
- If you have a jobsite computer, remove it from the site and secure at main office location or other secure site. Back up and secure all data.

**Hurricane Watch is Issued** *[Issued when a hurricane is 3 days out – hurricane conditions (winds of 74 mph or greater) may threaten your area within 36 hours]*

- Walk the job site and reasonable area around the construction zones to assure all loose debris is removed
- Arrange to have dumpsters removed
- Halt material deliveries
- Stop production of any work that is highly vulnerable to damage
- Complete tasks such as concrete work if it may prevent damage to the job site
- Have your subs secure or remove unnecessary materials or equipment from job sites
- Prepare to cover windows and glass doors; secure all other doors
- Plan for the next day as if a Hurricane Warning will be issued, make sure there is enough time to complete the tasks necessary for a Hurricane Warning

**Hurricane Warning is Issued** *[Issued when a hurricane is 1 day away - sustained winds of 74 mph or higher are expected in your area within 24 hours]*

- Make sure the dumpsters have been removed or are empty
- Remove scaffolding
- Secure or remove all building materials
- Turn off power at circuit breakers to any temporary electric service and to homes under construction
- Close and cover all windows with plywood
- Back-up all computer records
- Make sure your office is secure
- If authorities call for evacuation, all employees are to leave immediately

**After a Hurricane Has Passed**

- All Employees are to contact the office in person or by telephone as soon as (cell or land line) service is available so we know everyone is ok. (863) 467-0831 office or the Safety Director (863) 634-4260.

## FIRE SAFETY PROCEDURE

If a fire is reported or experienced on site, certain actions should be taken immediately! Speed is of the essence, since the first five minutes of a fire are the most important.

If you know that the fire is small and in its initial stage, use fire extinguishers or water or even sand to put it out.

If the fire is of unknown size and location, you should first call "911" or the local fire department. If, when they arrive, the fire is under control, they can leave. Remember the first five minutes count and if it is a serious fire, you want them on the way!

If smoke exiting a building is your only indication of a fire, a judgment call must be made as to whether anyone should enter the building. If there is a large amount of smoke and visibility is limited, do not enter the building. Remember, where there is smoke, there is also deadly carbon monoxide. Don't forget, the fire department is on the way, and they are equipped with the proper breathing apparatus to enter a smoke filled building.

As soon as possible, have each supervisor on the jobsite take a roll call to determine who, if anyone, may be trapped in the building. Be prepared to inform the fire department if you think anyone may be trapped inside.

On large projects, it is a good idea to make an evacuation plan and actually conduct fire drills to familiarize all workers before a fire occurs.

## DRUG TESTING

Close Construction is committed to providing a safe, efficient, and productive work environment for all employees. Using or being under the influence of drugs on the job may pose serious safety and health risks. To help ensure a safe and healthful working environment, job applicants and employees may be asked to provide body substance samples (such as urine and/or blood) to determine the illicit or illegal use of drugs and alcohol. Refusal to submit to drug testing may result in disciplinary action up to and including termination of employment.

The Employee Assistance Program (EAP) provides confidential counseling and referral services to employees for assistance with such problems as drug and/or alcohol abuse or addiction. It is the associate's responsibility to seek assistance from the EAP prior to reaching a point where his or her judgment, performance or behavior has led to imminent disciplinary action. Participation in the EAP after the disciplinary process has begun may not preclude disciplinary action, up to and including termination of employment.

Copies of the drug testing policy will be provided to all employees. Employees will be asked to sign an acknowledgment form indicating that they have received a copy of the drug testing policy. Questions concerning this policy or its administration should be directed to the President and/or CEO. A copy of the above referenced policy is located on the following pages.

## DRUG AND ALCOHOL USE

It is Close Construction's desire to provide a drug-free, healthful, and safe workplace. To promote this goal employees are required to report to work in appropriate mental and physical condition to perform their jobs in a satisfactory manner.

While on Close Construction's premises and while conducting business-related activities away from Close Construction's premises, no employee may use, possess, distribute, sell, or be under the influence of alcohol or illegal drugs. The legal use of prescribed drugs is permitted on the job only if it does not impair an associate's ability to perform the essential functions of the job effectively and in a safe manner that does not endanger other individuals in the workplace.

Violations of this policy may lead to disciplinary action, up to and including immediate termination of employment, and/or required participation in a substance abuse rehabilitation or treatment program. Such violations may also have legal consequences. To inform employees about important provisions of this policy, Close Construction has established a drug-free awareness program. The program provides information on the dangers and effects of substance abuse in the workplace, resources available to employees, and consequences for violations of this policy.

Employees with questions or concerns about substance dependency or abuse are encouraged to use the resources of the Associate Assistance Program. They may also wish to discuss these matters with their supervisor or the President and/or CEO to receive assistance or referrals to appropriate resources in the community.

Under the Drug Workplace Act an associate who performs work for a government contract or grant must notify Close Construction of a criminal conviction for drug activity occurring in the workplace. The report must be made within five days of the conviction.

Employees with questions on this policy or issues related to drug or alcohol use in the workplace should make their concerns known to their supervisor, the Human Resources Manager, or the President without fear of reprisal.

EVERYONE'S RIGHTS AND RESPONSIBILITIES  
UNDER THE OSHA HAZARD COMMUNICATION STANDARD ("HAZCOM")

What is HazCom?

HazCom says that all employees must be trained about:

- 1) The hazards substances they are working with, and
- 2) What they need to do to protect themselves from injury or illness.

What hazardous substances are present on construction sites?

Many common construction products are considered hazardous. Most will fall into five broad hazard categories: flammable & combustibles, compressed gases, systemic poisons, corrosives, and irritants, dust & fumes.

How do I know which products I'm using are hazardous?

All hazardous products must have a label which explains the dangers of the product. These labels will be tagged with such words as "caution," "warning," "corrosive," "danger," "toxic," "flammable," etc. The labels will also tell you the proper way to use the product.

Also, each hazardous product has a Material Safety Data Sheet (MSDS) which explains the dangers of the product in more detail. Your employer has a file of MSDS's which are available for you to review.

What do I need to do when working with hazardous substances?

There are only three ways a hazardous substance can hurt you: if you breathe it, eat it or touch it. When working with these substances, you must always follow safety rules of your employer and the guidelines outlined on the labels and MSDS. Make sure you wear the necessary protective gear and have adequate ventilation when working with hazardous substances. You should also know what to do in case of an emergency or accident.

What if I'm just working around someone else who is using hazardous substances?

Even if you're only near someone who is using hazardous products, you still need to protect yourself. Make sure you have protective gear such as a mask or respirator and make sure there is good ventilation.

How do I know what my employer is supposed to do under HazCom?

Every employer has a written hazard communication program which outlines his responsibilities under the HazCom rule. It also has an inventory list of all hazardous products the employer is using. The written program is also available for you to review.

## MATERIAL SAFETY DATA SHEET (MSDS)

### INTRODUCTION

The Material Safety Data Sheet (MSDS) is a detailed information bulletin prepared by the manufacturer or importer of a chemical that describes the physical and chemical properties, physical and health hazards, routes of exposure, precautions for safe handling and use, emergency and first-aid procedures, and control measures. Information on a MSDS aids in the selection of safe products and helps prepare employers and employees to respond effectively to daily exposure situations as well as to emergency situations.

The MSDS's are a comprehensive source of information for all types of employers. There may be information on the MSDS that is not useful to you or not important to the safety and health in your particular operation. Concentrate on the information that is applicable to your situation. Generally, hazard information and protective measures should be the focus of concern.

This section contains a glossary of terms used on MSDS's. Some employers and employees who are not very familiar with chemical terminology may find this helpful in reading and understanding MSDS's.

### OSHA REQUIREMENTS

Employers must maintain a complete and accurate MSDS for each hazardous chemical that is used in the facility. They are entitled to obtain the information automatically upon purchase of the material. When new and significant information becomes available concerning a product's hazards or ways to protect against the hazards, chemical manufacturers, importers, or distributors must add it to their MSDS within three months and provide it to their customers with the next shipment of the chemical. Employers must have an MSDS for each hazardous chemical used in the workplace. If there are multiple suppliers of the same chemical, there is no need to retain multiple MSDS's for that chemical.

While MSDS's are not required to be physically attached to a shipment, they must accompany or precede the shipment. When the manufacturer/supplier fails to send an MSDS with a shipment labeled as a hazardous chemical, the employer must obtain one from the chemical manufacturer, importer, or distributor as soon as possible. Similarly, if the MSDS is incomplete or unclear, the employer should contact the manufacturer or importer to get clarification or obtain missing information.

### SECTIONS OF AN MSDS AND THEIR SIGNIFICANCE

OSHA specifies the information to be included on an MSDS, but does not prescribe the precise format for an MSDS. A non-mandatory MSDS form that meets the Hazard Communication Standard requirements has been issued and can be used as is or expanded as needed. The MSDS must be in English and must include at least the following information.

## SECTION I. CHEMICAL IDENTITY

- 1 The chemical and common name(s) must be provided for single chemical substances.
- 2 An identity on the MSDS must be cross referenced to the identity found on the label.

## SECTION II. HAZARDOUS INGREDIENTS

1. For a hazardous chemical mixture that has been tested as a whole to determine its hazards, the chemical and common names of the ingredients that are employed with the hazards, and the common name of the mixture must be listed.
2. If the chemical is a mixture that has not been tested as a whole, the chemical and common names of all ingredients determined to be health hazards and comprising 1 percent or greater.
3. Chemical and common names of carcinogens must be listed if they are present in the mixture at levels of 0.1 percent or greater.
4. All components of a mixture that have been determined to present a physical hazard must be listed.
5. Chemical and common names of all ingredients determined to be health hazards and comprising less than 1 percent (0.1 percent for carcinogens) of the mixture must also be listed if they can still exceed an established Permissible Exposure Limit (PEL) or Threshold Limit Value (TLV) or present health risk to exposed employees in these concentrations.

## SECTION III. PHYSICAL AND CHEMICAL CHARACTERISTICS

The physical and chemical characteristics of the hazardous substance must be listed. These include items such as boiling and freezing points, density, vapor pressure, specific gravity, solubility, volatility, and the product's general appearance and odor. These characteristics provide important information for designing safe and healthful work practices.

## SECTION IV. FIRE AND EXPLOSION HAZARD DATA

1. The compound's potential for fire and explosion must be described. Also, the fire hazards of the chemical and the conditions under which it could ignite or explode must be identified.
2. Recommended extinguishing agents and fire-fighting methods must be described.

## SECTION V. REACTIVITY DATA

This section presents information about other chemicals and substances with which chemical is incompatible, or with which it reacts. Information on any hazardous decomposition products, such as carbon monoxide, must be included.

## SECTION VI. HEALTH HAZARDS

1. The acute and chronic health hazards of the chemical, together with signs and symptoms of exposure, must be listed. In addition, any medical conditions that are aggravated by exposure to the compound, must be included. The specific types of chemical health hazards defined in the standard include carcinogens, corrosives, toxins, irritants, sensitizers, mutagens, teratogens, and effects on target organs (I.e., liver, kidney, nervous system, blood, lungs, mucous membranes, reproductive system, skin, eyes, etc.)
2. The route of entry section describes the primary pathway by which the chemical enters the body. There

- are three principal routes of entry, inhalation, skin and ingestion.
3. This section of the MSDS supplies the OSHA PEL, the ACGIH TLV, and other exposure levels used or recommended by the chemical manufacturer.
  4. If the compound is listed as a carcinogen (cancer-causing agent) by OSHA, the National Toxicology Program (NTP), or the International Agency for Research on Cancer (IARC), this information must be indicated on the MSDS.

## SECTION VII. PRECAUTIONS FOR SAFE HANDLING AND USE

The standard requires the preparer to describe the precautions for safe handling and use. These include recommended industrial hygiene practices, precautions to be taken during repair and maintenance of equipment, and procedures for cleaning up spills and leaks. Some manufacturers also use this section to include information not specifically required by the standard, such as EPA waste disposal methods and state and local requirements.

## SECTION VIII. CONTROL MEASURES

The standard required the preparer of the MSDS to list any generally applicable control measures. These include engineering controls, safe handling procedures, and personal protective equipment. Information is often included on the use of goggles, gloves, body suits, respirators and face shields.

## EMPLOYER RESPONSIBILITIES

Employers must ensure that each employee has a basic knowledge of how to find information on an MSDS and how to properly make use of that information. Employers also must ensure the following:

1. Complete and accurate MSDS's are made available during each work shift to employees when they are in their work areas.
2. Information is provided for each hazardous chemical.

## HAZARD COMMUNICATION WRITTEN PROGRAM

This program has been prepared to comply with the requirements of the Federal OSHA Standard 1910, 1200 and to insure that information necessary for the safe use, handling and storage of hazardous chemicals is provided to and made available to employees.

This program includes guidelines on identification of chemical hazards and the preparation and proper use of container labels, placards and other types of warning devices.

## CHEMICAL INVENTORY

1. Close Construction maintains an inventory on all known chemicals in use on the work site. A chemical inventory is available from the Superintendent at the job site.
2. Hazardous chemicals brought onto the work site by Close Construction will be included on the hazardous chemicals inventory list.

3. Hazardous chemicals brought onto the work site by the Subcontractor will be reported to the Superintendent and included on the hazardous chemical inventory list.

### CHEMICAL LABELING

1. All chemicals on site will be stored in their original or approved containers with a proper label attached, except small quantities for immediate use. Any container not properly labeled should be given to the Subcontractor Job Foreman for labeling or proper disposal.
2. Workers may dispense chemicals from original containers only in small quantities intended for immediate use. Any chemical left after work is completed, must be returned to the original container or the Subcontractor Job Foreman for proper handling.
3. No unmarked containers of any size are to be left in the work area unattended.
4. Close Construction and Subcontractors will rely on manufacturer applied labels whenever possible and will insure that these labels are maintained. Containers that are not labeled or on which the manufacturer's label has been removed will be relabeled.
5. Close Construction and Subcontractor will insure that each container is labeled with the identity of the hazardous chemical container and any appropriate hazard warnings.

### MATERIAL SAFETY DATA SHEET (MSDS)

1. Employees working with a hazardous chemical may request a copy of the Material Safety Data Sheet (MSDS). Requests for a MSDS should be made to the Superintendent.
2. MSDS's should be available on the site to provide immediate reference to chemical safety information.
3. An emergency procedure to gain access to MSDS's information will be established.

### EMPLOYEE TRAINING

1. Methods that may be used to detect a release of a hazardous chemical(s) in the work place.
2. Physical and health hazards employed with chemicals.
3. Protective measures to be taken.
4. Safe work practices, emergency responses and use of personal protective equipment.
5. Information of the Hazard Communication Standard including:
  - a. Labeling and warning systems, and
  - b. An explanation of Material Safety Data Sheets.

### PERSONNEL PROTECTIVE EQUIPMENT (PPE)

Required PPE is available from the Superintendent or Job Foreman. Any employees found in violation of PPE requirements may be subject to disciplinary actions up to and including discharge.

## EMERGENCY RESPONSES

1. Any incident of overexposure or spill of hazardous chemical/substance must be reported to the Superintendent.
2. The Subcontractor Job Foreman and Superintendent will be responsible for insuring that proper emergency response actions are taken in leak/spill situations.

## HAZARDS OF NON-ROUTINE TASKS

1. Supervisors will inform employees of any special tasks that may arise which would involve possible exposure to hazardous chemicals.
2. Review of safe work procedures is required PPE will be conducted prior to the start of such tasks. Where necessary, areas will be posted to indicate the nature of the hazard involved.

## INFORMING OTHER EMPLOYERS

1. Other on site employers is required to adhere to the provisions of the Hazard Communication Standard.
2. Information on hazardous chemicals known to be present will be made available to other employers. Employers will be responsible for providing necessary information to their employees.
3. Other on site employers will have access to a copy of Close Construction Construction's Hazard Communication Program.

## POSTING

Close Construction has made available at the job site information for employees on the Hazard Communication Standard. This information can be obtained from the Superintendent, Safety Director, Human Resources Department or from our website.