



Safety and Health Plan



DIFIORE CONSTRUCTION INC.

Safety and Health Plan

© DiFiore Group
155 Pool St
Rochester, NY 14606
Phone 585.235.2310 • Fax 585.235.6305

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1. MANAGEMENT POLICY STATEMENT

At DiFiore Construction our people are our most important asset and their safety is our greatest responsibility.

It is DiFiore Construction's policy that every employee is entitled to a safe and healthful place to work.

When a person enters the employment of our company, they have a right to expect that they will be provided with a safe place in which to work, safe machines and tools with which to do the job and that they will be able to devote their energies to their work.

It is everyone's responsibility to make the safety and health of all human beings a part of our daily, hourly concern. This responsibility must be accepted by each one of us, regardless of position or capacity. Employees are expected to use the safety equipment provided. Rules of conduct and rules of safety and health shall be observed. Safety equipment must not be destroyed or abused.

Our employees have the right to work in an alcohol and drug free environment. Employees who abuse alcohol or drugs are a danger to themselves and to other employees. DiFiore Construction is, therefore, committed to maintaining a safe place, free from the influence of alcohol and drugs.

The joint cooperation of employees and management in the observance of this policy will provide safe working conditions and accident-free performance to our mutual advantage.

Thank you for your anticipated cooperation.

2. RESPONSIBILITIES

PURPOSE

This document defines the responsibilities of management and employees regarding safety.

PROJECT SUPERINTENDENT RESPONSIBILITIES

The Project Superintendent has full responsibility for the execution of the company's safety program. When an interface of responsibility arises the Project Superintendent has a responsibility to see that proper and effective action is taken.

Joint Responsibilities of Project Managers and Superintendents:

- The safety of employees assigned to their projects.
- The safety of the public.
- Prevention of damage to company or other property.
- Prevention of loss, damage, or abuse of equipment and tools.

Responsibilities of Project Superintendents/Manager:

1. Accomplish proper and positive corrective actions on safety recommendations resulting from safety inspections or accident investigations.
2. Participate, with the safety engineer/manager, in making pre-job safety surveys when requested.
3. Communicate safety information to supervisors and alert them to potential dangers that may develop from their daily operations.
4. Assure that all required signs are posted and bulletin boards are maintained in clear and legible condition.

Some of the required signs are:

- State fair employment
- Unemployment benefits
- Employee's right to know or hazard communication
- Minimum wage
- Equal employment opportunity
- OSHA safety and health
- Emergency telephone number
- Utility telephone number

5. Install a housekeeping program, which includes:
 - a. Assignment of definite housekeeping duties to specific individuals,
 - b. Regular inspections on daily walk-around of the job site.
6. Maintain an inspection schedule of the following:
 - a. All rigging equipment including: wire rope, shackles, blocks, bell and telephone systems, slings, manila rope, scaffolds, etc.,
 - b. Fire extinguishers, first aid kit(s), power actuated tools, and pneumatic equipment.
 - c. Major equipment such as backhoes, graders, cranes, derricks, trucks, welding machines, boats, etc.,
 - d. Electrical cord sets, receptacles, and tools in accordance with the Assured Equipment Grounding Program and Ground Fault Circuit Interrupters,
 - e. Personal protective and life saving equipment,
 - f. Excavation and trenches.
7. Require all employees to properly use personal protective equipment such as safety lines, goggles, clothing, ventilation equipment, etc. Make sure that safety equipment is recovered when employees quit or terminate.
8. Make spot checks covering unsafe acts, unsafe conditions, equipment condition, and observance of safety rules.
9. Personally review all injuries with the injured person and the supervisor.
10. Participate in the investigation of all fatal and disabling accidents and those involving equipment damage.
11. Instill in all personnel, by action, example, and training, a sincere attitude toward safety, and develop an understanding of accident prevention methods
12. Enforce compliance with federal, state, city, and/or other agency requirements.
13. Obtain reports from subcontractors concerning any accident to either their employees or property and conduct an investigation
14. Make certain that employee safety meetings are held (preferably early in the week). and that reports are submitted to the Safety Manager.
15. Cooperate in the rehabilitation and return of injured employees to useful work.

16. If one of our employees observes a serious safety hazard under (he jurisdiction of another contractor, we should document the observation and notify the contractor of the hazard.

SUPERVISOR RESPONSIBILITIES

Supervisors are responsible for enforcement of all safety precautions applicable to the work under their supervision. They are responsible for:

1. Understanding the requirements of OSHA and all other pertinent safety regulations and guidelines.
2. Enforcing all safety rules and regulations within the scope of their work assignment
3. Correcting unsafe acts or unsafe conditions.
4. Requesting help and assistance from the Superintendent whenever necessary.
5. Explaining all applicable safe practice rules and regulations to employees and training the assigned employees in the safe way to perform assigned tasks.
6. Educating/training all new employees in the applicable operating and safety rules.
7. Determining that each employee is qualified and able to perform the work.
8. Obtaining, distributing, and maintaining personal protective equipment necessary for job accomplishment such as safety glasses, hard hats, goggles, respirators, gloves, boots, etc.
9. Providing necessary protection to employees, the public, and equipment.
10. Reporting all injuries, damages, or losses immediately to the Superintendent, and arranging for any first aid or medical care.
11. Taking action to prevent further injuries or damages after an incident.
12. Investigating and completing a record of all injuries or damages of any nature that result from work performed by the crew
13. Reporting to the Safety Director any employees who fail to follow company safe work policies and procedures
14. Attending safety meetings for supervision.
15. Forwarding to the Safety Director all requests, suggestions, and complaints made with regard to safe working conditions.

16. Cooperating in the rehabilitation and return of injured employees to usual work.

EMPLOYEE RESPONSIBILITIES

Each employee has a responsibility to themselves for their own safety. They also have a responsibility to their family, to their fellow workers, to the community, and to the company.

Employees will:

1. Comply with all company rules including company safety policies and all government safety regulations.
2. Follow instructions from their supervisors.
3. Use personal protective equipment and devices provided for machinery, equipment, tools and processes.
4. Report all accidents and injuries immediately.
5. Report all unsafe conditions to their supervisors.

SAFETY ENGINEER/MANAGER RESPONSIBILITY

1. In cooperation with supervisors, determine the necessity for personal protective clothing and equipment and approve articles to be purchased and supplied.
2. Provide a written report of inspections made of the worksites, storage yard and office with copies maintained on file.
3. Make inspections of work sites and temporary structures such as scaffolding, formwork, hoisting equipment (for strength, stability and adequate safeguards), and ascertain that routine technical inspections are made.
4. Investigate accidents resulting in serious injuries and promptly report them Provide the methods for appropriate investigation and recording of less serious accidents.
5. Prepare and make monthly distribution of accident incidence and accident cause analysis.
6. Review safety related inspections made by others.
7. Analyze first aid and minor traffic accidents to detect trends or danger areas, and eliminate hazards.
8. Ensure employee safety by conducting safety meetings, training, and/or distributing relevant safety information to supervisors.

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9. Serve as a liaison with federal, state, local and private agencies on matters pertaining to industrial or construction safety and hygiene.
10. Stop any operation or action, which is, judged an imminent hazard until the hazardous condition or procedure can be remedied.
11. Advise the insurance company on the validity of Workers Compensation claims and conduct investigations appropriate to such claims.
12. Maintain an active safety surveillance of the operation of subcontractors.
13. Submit disabling injury tabulation forms on a monthly basis.
14. Prepare any reports or records required by the customer or Occupational Safety & Health Act of 197

EMPLOYEE ORIENTATION

When a new employee is signed up, they shall immediately be instructed in the general safety and health requirements of DiFiore Construction at the job site office.

Before starting work on the project, each new employee will also be instructed in the particular safety and health requirements of this project by their foreman. Particular emphasis will be placed on:

1. The nature and scope of the overall project.
2. Any particular hazards peculiar to the project and to the area in which the employee is to work.
3. The importance of keeping in mind at all times the safety of fellow workmen, as well as the safety of one's self.
4. The importance of wearing proper work clothes and protective equipment as required.
5. The fact that continual disregard of safety instructions or safety practices will be considered grounds for termination of employment.
6. The importance of locating fire extinguishers, first aid facilities and reporting all accidents or potential hazards to the Superintendent/Foreman.

3. DISCIPLINARY POLICY

PURPOSE

Safety requires constant day-to-day attention from everyone on the project. It is for this reason that each employee must follow the safety rules and regulations of DiFiore Construction, the federal and state agencies, and the owner for whom the work is being done. In order to ensure a safe place for each employee, we have developed Disciplinary Policy and Procedures to enforce these safety rules and regulations.

RESPONSIBILITIES

The Project Superintendents and Supervisors are responsible for implementation of the Disciplinary Policy and Procedure.

PROCEDURE

1. Employees are subject to one of the following disciplinary actions as a result of a safety violation:
 - a. First violation: Warning
 - b. Second violation: Mandatory 1 day work suspension without pay, and/or removal from site.
 - c. Third violation: Termination.
 - d. In each case the employee will be provided a written safety violation notice. A copy of the notice will be issued to the employee's project manager, employee's union, and the safety department.
2. When issuing a safety violation notice, meet with the employee(s) to discuss the safety infraction. Inform the individual(s) of the rule or procedure that was violated and the corrective action to be taken. Complete the safety violation notice in its entirety and issue the copies as directed on the form. The union copy shall be sent to the safety department.
3. Nothing in this policy prohibits the immediate dismissal or removal from the job site of any employee whose conduct constitutes a serious violation of the safety requirements, which could cause serious danger to himself/herself, co-workers, property, equipment, or other employees.
4. Questions regarding the Disciplinary Policy are to be directed to the Safety Director.

SUPERVISOR RESPONSIBILITY

The on-site supervisory personnel will be judged by the same rules as field employees, and because of the safety stewardship, will bear responsibility for overall site conditions.

If an inspection of activities and areas under your control indicates violations showing

overall lack of commitment to company safety goals, the project superintendent and/or supervisor will be issued a written warning.

Two written warnings will be considered cause for disciplinary lay-off or demotion.

Three written warnings will be considered cause for dismissal.

Failure to institute corrective procedures after top management has ordered them shall be considered insubordination and is cause for dismissal. It is required that the suspension and termination process be completed under the direction of the project manager.

GENERAL SAFETY RULES

Use good judgment in doing your work. Do not take unnecessary chances.

1. **HARD HATS** must be worn at all times; the Safety Director must approve any exceptions.
2. **SAFETY GLASSES** must be worn at all times; the Safety Director must approve any exceptions. **GOGGLES** are compulsory when drilling, burning, chipping, grinding, gas welding, grouting and where otherwise required by your supervisor.
3. Use **SAFETY HARNESS. SHOCK ABSORBERS. AND LANYARDS** when within six feet of open edges.
4. **SHIRTS** with sleeves are to be worn at all times by all personnel while on company time; the job supervisor must approve any exceptions. Shorts, tank tops, loose or ragged clothing will not be permitted.
5. **FINGER RINGS AND WRISTWATCHES** are a constant hazard and all employees are encouraged to remove them while working.
6. **WELDING HELMETS** are mandatory for all arc welders and safety spectacles must be worn under the helmet.
7. **GLOVES** are to be worn when handling material with sharp or rough edges or as directed by your supervisor.
8. **AUTOMATIC SUSPENSION:** the committing of any of the following items will subject you to suspension and/or discharge:
 - a. Disobeying a supervisor's request to utilize personal protective equipment, or instructions on safe performance of a specific job or task.
 - b. Removing a barricade, guard or other safety device designed to prevent injury.

- c. Unfit for duty- coming to the job or presenting oneself in a condition non-conclusive for safe work; working while under the influence, or in possession of narcotics or intoxicating liquors; or consumption of any narcotics or intoxicating liquors during working hours.
- d. Sleeping during work hours
- e. Fighting or provoking a fight
- f. Stealing - unauthorized removal, attempted removal or possession of property belonging to someone else or to the company.
- g. HORSEPLAY in any form, scuffling, pranks, wrestling, throwing material at others, etc...

9. VIOLATIONS of company rules will result in the following:

- 1st offense - Verbal and/or written warning
- 2nd offense - Written warning
- 3rd offense - Termination of employment

**All written warnings will be placed in the employee's personnel file.

- 10. THE SOURCE OF POWER MUST BE DISCONNECTED whenever it is necessary to repair a piece of power-driven equipment. In the case of electrical equipment, the cord must be disconnected or the switch putted and locked Out, **if** possible. It is not sufficient to merely turn off the operating button of the equipment. NOTE: Only authorized persons are to repair electrical equipment.
- 11. KEEP YOUR WORKPLACE CLEAN: Good housekeeping promotes safe and efficient work. Do not allow trash, scrap or boards with nails to accumulate in your work area.
- 12. ALL LADDERS MUST BE INSPECTED prior to the start of each job and this practice is to be repeated frequently throughout the term of the job. Extreme care should be exercised in placing the ladder on a firm and level foundation. In all cases, the ladder must both have ladder feet or spikes and be lashed (tied off) or hooked to the structure.
- 13. LADDERS BUILT ON THE JOB must be built of No. 1 grade lumber, free of knots and have the cleats capped, blocked, wired or stripped. LADDERS SHOULD NEVER BE PAINTED.
- 14. GUARDS, GUARDRAILS, AND BARRICADES. Guards and safety devices shall be used on mechanical equipment such as power saws, grinders, etc. Guards for belts or chain drives, drive shafts, etc. shall be kept in place while equipment is operating.

Guardrails, barricades or ropes should be used at all times around excavations, floor openings, stairways and any other places where personnel may be exposed to falls.

15. NEVER CLIMB or descend a ladder with anything in your hands or sticking out of your pockets Use a hand line for tools and equipment. Ladders used to reach higher or tower elevations must extend at least 3 feet above landing.
16. ELECTRIC WIRES. Where we have the capability of being within 20 feet of live power lines, either physically or with equipment, the supervisor, superintendent and manager will be advised before work begins. Further, we will not operate where our equipment can come within 10 feet of a power line without approval and knowledge of utility company.
17. ALL ELECTRICAL EQUIPMENT must be grounded. Three-pronged plugs and receptacles are required. Electrical power from public supply or generators must pass through Ground Fault Interrupter, (G.F.I.). Refer to OSHA 1926.404
18. HAND TOOLS such as hammers, punches, picks, chisels, etc., should be inspected for faulty handles, mushroomed heads. etc., prior to the start of each job, and will be re-inspected at weekly intervals throughout the term of the job.
19. CABLES, ROPES, SHEAVES, SHACKLES, BOOMS, LIFTING EQUIPMENT, ETC. should be checked each day. Worn or frayed items are to be replaced or repaired at once.
20. STAY OUT FROM UNDER OR IN FRONT OF LOADS on cranes, etc. Do not cause or permit a load to be carried over a workman who is unaware of it or cannot get clear. Red Tape around Crane & Lift.
21. NO EMPLOYEE is permitted to ride the "Headache" ball or any piece of steel being moved or lifted by crane or other equipment, or man baskets.
22. NO EMPLOYEE is permitted to walk on building purlins or girts or perform aerial work unless he is wearing a safety harness and lanyard that is fastened to fixed members.
23. GASOLINE may be handled or stored only in approved and properly labeled safety cans. All gasoline and diesel engines must be shut off and cooled before and during refueling. Fire extinguishers must be available in the work area.
24. THE MISUSE OF OXYGEN AND ACETYLENE EQUIPMENT can be extremely dangerous. Unless you are qualified and authorized to use this equipment, leave it alone. Common misuses of this equipment are rough handling of bottles or of torches, permitting oil to get into oxygen fittings, and burning without regard to nearby combustibles. All compressed air and gas bottles must be secured in an upright position.
25. COMPRESSED AIR HOSES should never be pointed at you or anyone else. Compressed air must be used for the prescribed operations only Pressures should be

kept as low as possible for doing the job adequately. Use a maximum of 30-lb. psi for cleaning.

26. CEMENT BURNS are a constant hazard in construction work, particularly in warmer weather. Be sure cement does not get inside your boots or gloves. Wash off any cement or concrete that gets on you as soon as possible. Report any burns, no matter how slight, to your supervisor.
27. EXCAVATIONS must be guarded at all times by barriers, and at night must have red or amber warning lights. Openings in the floor or ground into which someone might step or fall must be railed off, covered, or properly identified with warning lights.
28. RIDING No more than three men may ride in a cab of any truck at one time. No one will ride outside of truck cab. All persons riding in truck cab must wear seat belts. Only the operator will ride on construction equipment except as assigned
29. ALL construction equipment will have operating backup alarms. Inoperative equipment will be reported immediately.
30. DO NOT ATTEMPT TO LIFT objects that are too heavy for you to lift alone. Ask for help.
31. IF YOU RECEIVE AN INJURY, no matter how slight, report it to your supervisor immediately.
32. All employees will be required to attend and participate in safety meetings. You will be advised of the time and place of your meeting.
33. Glass-bottled soft drinks will not be permitted on the project.
34. Know the materials you are working with and read all labels. All chemical hazard warnings and means for protection should be understood and followed.
35. All scaffolding will be built and maintained under the supervision of a competent person in accordance with OSHA standards.
36. NO EMPLOYEE shall operate specialized equipment unless he/she has received OSHA required training.

All employees are required to correct and/or report any unsafe job conditions and/ or any unsafe act to their supervisor. Suggestions for improving job safety are welcome. All suggestions and recommendations will be given careful consideration by management. Superintendents and general supervisors will cooperate fully in putting into effect all practical suggestions that will reduce job hazards.

Each employee must comply with the safety requirements set forth in this booklet, along with the safe practices and methods inherent to the craft. Safety will be an integral part of each job and each employee shall be responsible for the safety phase of his work just as

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much as he is for any other phase. Employees should exercise good judgment in carrying out the safety program. Appropriate disciplinary action will be taken for violations.

4. ALCOHOL AND DRUG-FREE WORKPLACE

PURPOSE

To establish and maintain a drug-free, alcohol-free, safe, healthy work environment for all workers and the public.

RESPONSIBILITIES

DiFiore Construction does not have, at this time, a formal Alcohol and Drug Free program. It does, however, endorse the principles of such a program and expects all employees to adhere to the precepts of such a program.

Employees, when requested, are responsible for submitting to pre-employment drug and alcohol testing, and testing for drugs and/or alcohol in the event a supervisor has reasonable cause to suspect an abuse problem exists. Furthermore, it is the employee's responsibility to admit to a substance abuse problem should he realize that one exists and to voluntarily accept assistance and rehabilitation.

The company is aware that the presence and use of alcohol and drugs in the workplace is a clear hazard to everyone. Therefore, it is a company requirement that any employee found to be in possession of, consuming, using, or selling alcohol or drugs while on company property shall be subject to mandatory disciplinary action up to and including discharge.

The company recognizes that the use of alcohol and other drugs can be a safety and health issue to the employee and their co-workers. Therefore, it is required that all employees shall be free of the presence of drugs and the influence of alcohol when they report for work or at any time when on company property, representing the company interest or when handling company property. If any employee must, out of medical necessity, use a medication that could potentially affect work performance, then it is the responsibility of that employee to notify his or her immediate supervisor prior to reporting for work.

At this time, the Disciplinary Policy of this document will govern action against violators.

5. PROJECT SAFETY PLAN

PURPOSE

On certain projects a Project Safety Plan is required to supplement the existing, required safety program by identifying all real and potential hazards of a project and providing specific plans to deal with those hazards. The Project Safety Plan will include clear definitions of the contractor and subcontractors responsibilities and those of their respective employees. The purpose of this section is to provide the guidelines for developing a project-specific Safety Plan.

RESPONSIBILITIES

The Safety Director or project superintendent is responsible for developing a project safety plan whenever the complexity of the project warrants it, when the customer requests it or when there is a legal requirement for one.

PROCEDURE

1. Through inspection of the site, inquiries to the customer, and other investigation, obtain appropriate information about potential hazards and available resources. Record inspections. This should include the following information:
 - a. Materials which will be present in or near the work area
 - i. Locations
 - ii. Quantities
 - iii. Copies of material safety data sheets
 - iv. Any contamination which exists or may exist in or near the work area (such as PCBs, mercury, asbestos, etc.)
 - v. Locations of any regulated materials which may have to be contacted or disturbed during the work (such as asbestos or PCB's)
 - b. Sources of Ionizing radiation (x-ray machines and radioactive sources)
 - c. Any equipment which will be operating or may start automatically (such as robots, conveyors, manipulators, exhaust systems, air handling units, compressors, etc)
 - d. Ambient noise levels
 - e. Provide a listing of Emergency Procedures and emergency services names, locations and telephones for hazards involving

- i. Medical
 - ii. Fire
 - iii. Spills or releases
 - iv. Utilities
 - v. Facility and equipment damage
 - f. Sources of technical information
 - i. Safety
 - ii. Environmental Engineering
 - iii. Security
 - g. Special access controls and security requirements.
2. **PROPOSED OPERATIONS:** Review the proposed scope of work and operations to identify the hazards that are inherent to the project and those that may be created or compounded by adjacent customer operations, facilities, or processes, Specifically identify hazards associated with the following:
- a. materials to be used
 - b. elevated work
 - c. excavations
 - d. traffic and pedestrian control
 - e. confined spaces
 - f. noise levels
 - g. dust/contamination
 - h. utility disruptions
 - i. production disruption
 - j. product movement
 - k. employee discomfort

- l. lockouts
 - m. poor lighting
 - n. cutting, welding, open flame work
 - o. internal combustion engines being used
 - p. cranes and hoists
3. Review all of the information regarding the materials the customer will have at or near the work site, the materials, which we will use, and any contamination, which may be present.
 - a. Determine whether an incompatibility exists among the various materials and if so develop a protective measure to prevent contact between the incompatible materials.
 - b. Determine the respirator protection to be used, if any is needed for these materials.
 - c. Determine whether measurements of employee exposure to airborne contaminants will be required.
 - i. Work that will require the measurements
 - ii. Contaminants
 - iii. The time the measurements be made
 - iv. The person will make the measurements
 4. Determine what hearing protection, if any is needed.
 5. Determine what other personal protection equipment is needed (such as gloves, hard-hats, harnesses, lanyards, etc.).
 6. Determine whether any special permits, licenses or qualifications will be required
 7. Through review of the above and the personnel training records, determine what training will be necessary.
 8. Determine who is responsible for housekeeping, cleaning methods and cleanliness to be maintained.
 9. Provide information regarding exit and evacuation plans, routes and methods.
 10. Write a plan incorporating all of the determinations and requirements developed above and issue **it** as an addendum to the company safety program applicable to this project. In the plan, describe what actions are needed to meet the requirements identified above, when they are to be done, and who is responsible for doing them. Provide a detailed schedule of the work including project name, location, description and contact names, phone numbers and pager numbers of both company and contractor responsible

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personnel. Distribute this plan to all company and contractor employees who will be affected by the project.

6. EMPLOYEE EXPOSURE ASSESSMENT PROGRAM

PURPOSE

The guidelines in this program are designed to understand and control employee exposure to airborne dusts, fumes, mists, gases, vapors, etc.

RESPONSIBILITIES

MANAGEMENT:

1. Determine which operations and tasks produce airborne contaminants through measurements and/or contacts with suppliers, associations, consultants, etc.
2. Develop a list which identifies all operations and tasks which produce airborne contaminants, the type of contaminant and the expected level of the contaminant in air.
3. Incorporate engineering improvements and/or personal protective equipment to reduce exposures to airborne dusts, fumes, mists, gases, vapors, etc. identified in the list.
4. Provide training programs and instructions for all contaminants, engineering improvements, and/or personal protective equipment identified in the list.

SUPERVISORY:

1. Superintendents, supervisors, or group leaders are responsible for training personnel about the list of airborne contaminants, engineering improvements, and/or personal protective equipment.
2. They are also responsible for requesting measurement and evaluation of any new job or material for inclusion on the list of airborne contaminants, including engineering improvements and/or personal protective equipment.

7. TRAINING

PURPOSE

This document states the safety training required for employees.

RESPONSIBILITIES

The job superintendent is responsible for investigating whether training is current for employees and arranging for training when necessary

REQUIRED SAFETY TRAINING

Training Program	Required for	Freq.
Asbestos awareness	All employees who may be exposed	Annually
Laser	Laser operators and people exposed	Annually
Respirators	Respirator users	Annually
Fire extinguisher use	Potential extinguisher users	Annually
Power actuated tool use	Users and people exposed	Annually
Power lift truck operation	Operators	Annually
Hazardous waste	Generators and handlers	Annually
Explosives Users	Users and people exposed	Annually
Welding	Welders, helpers and standby watchers	Annually
Manlift operation	Users	Annually
Roofing work	Roofers	Annually
Hazard Communication	All employees	Annually
Hearing Conservation	Employees who are potentially exposed over 85 dB(A) 8-hour TWA	Annually
Electrical safety	All employees	Annually
Hazardous energy control, (Lockout) - including electricity	All employees	Annually
Ionizing radiation	Users and people exposed	Annually
Confined space entry	Employees who enter confined spaces	Annually
First aid	One employee per 25 employees on site	Annually

PROCEDURE

1. Examine the training record for each employee hired or assigned to the project.
2. Compare the training record with the work the employee will be doing
3. Schedule the employee for any training that has not been completed or is not current.
4. Restrict the work activities of any employee until all applicable required training is completed.
5. Update employee training record for future reference.

8. TOOL BOX TALKS POLICY

It is the responsibility of Superintendents and Foremen to conduct toolbox talks of 5 to 10 minutes each week. Employees can never receive too much training. Therefore, top management expects job site management personnel to train their employees.

The subject of each training talk should be based on the type of work that is being performed.

Examples:

1. Review of OSHA requirements for excavation
2. The use of safety glasses when using circular saws, grinders, table saws, radial arm saws, jack hammers, power actuated tools, etc...
3. The proper set up and use of ladders.
4. Hard hats and why they are necessary.
5. A discussion of a recent accident.
6. A discussion of an old accident.
7. Perimeter protection maintenance.
8. Floor and roof opening protection maintenance.
9. A record should be kept of the subjects presented or discussed and the attendees.

9. SELF-INSPECTION POLICY AND PROCEDURE

It is the policy of DiFiore Construction to reduce and eliminate hazard exposures that could **lead** to employee injury or property damage. Self-inspection is a means of providing a safe work place for our employees.

It is the responsibility of the Supervisors to make daily visual inspections of their work areas and to test all equipment safety devices prior to the sled of the work shift. Maintenance must be provided immediately if any hazards exist or if any safety devices are not functioning properly. If the equipment cannot be repaired before being used so that it is safe to use, then it **SHALL BE REMOVED FROM SERVICE**.

Supervisors should complete, as necessary, the "General Inspection Form". All work areas including office areas can be inspected using this form. If any hazardous conditions are noted, corrective action shall be taken. Notify the Safety Director immediately for corrective action. If the corrective action is beyond your authority and/or capability, keep all employees away from the hazardous condition until the condition is corrected or controlled. Supervisors are expected to follow up on reported hazards to make sure that corrective action is taken to eliminate or control the hazard identified.

All completed forms, signed and dated by the Supervisors will be maintained with the job files. A copy should be forwarded to the Safety Director.

10. EMPLOYEE EMERGENCY PLANS

It is the responsibility of the Job Supervisor to identify and communicate emergency and evacuation procedures for each job site. Where appropriate, the evacuation procedures should be posted in an appropriate area. The nature of DiFiore's work lends itself to open areas where evacuations are not usually a problem it is imperative that procedures for notifying police, fire and medical are known to all employees.

11. ACCIDENT INVESTIGATION & REPORTING

PURPOSE

The purpose of accident investigation is to discover the cause or causes so that proper action may be taken to prevent a recurrence. Every accident indicates that proper preventive action was not taken.

A good accident investigation will:

1. Assist in determining the principal or underlying cause of the loss
2. Allow you to initiate significant corrective action
3. Aid in furnishing essential data for reports

RESPONSIBILITIES

Each supervisor is responsible for conducting a complete investigation and writing a report of every accident as soon as any emergency actions are completed. The Safety Director is responsible for reviewing each accident investigation report, and, together with the supervisor, determining the proper corrective action to take.

The Safety Director is responsible for implementing the corrective action.

PROCEDURE

1. When an accident occurs, immediately take all necessary emergency steps to prevent further injury or damage.
2. Interview those involved and witnesses as soon after the accident as possible. Maintain a fact-finding approach — do not attempt to place blame.
3. Determine the real or basic causes of the injury, illness or property damage. It is important to conduct an in depth probe about the cause; do not reach an early conclusion which influences witnesses interviewed later.
4. Establish corrective actions that will permanently control the cause of the accident. Use temporary measures only until the permanent corrective actions can be implemented.
5. Establish the priority of the corrective action considering the Severity and potential frequency of recurrence not just the severity of the accident being investigated .
6. Record and retain all reports. Accurate information must be available regarding the accident, the injury or *damage* that occurred, the corrective action identified. and

the time the corrective action was implemented. Preserve physical evidence for all serious accidents.

7. Periodic review of a significant number of accident investigation reports will aid the safety program. The review can identify repeaters who may need retraining. Problem areas or operations that need attention, or trends in frequency, which indicate a need for added prevention activities.

The effort expended on proper investigation and prompt corrective action will reduce future incidents.

GENERAL INVESTIGATION GUIDELINES

- A. The Investigative Process
 1. Analyze the incident to determine the cause or causes.
 2. Create a plan of corrective actions to eliminate the causes
 3. Assign responsibility for the corrective actions.
 4. See that the plan is carried out.
- B. Determine what unsafe conditions and/or acts contributed to the incident
 1. Inspect the location, equipment, and materials involved.
 2. Inquire about similar incidents that have occurred elsewhere.
 3. Review records.
 4. Interview those involved and witnesses.
- C. Key points for interviewing witnesses and victims
 1. Interview each person promptly.
 2. Interview each person separately.
 3. Reassure everyone that the purpose of the investigation is to determine causes and identify corrective actions not to place blame.
 4. Don't say anything that can be taken as blaming or threatening.
- D. Be polite and tactful. Try to assure everyone that his or her contribution is necessary.
 1. Ask that specific facts be given first, opinions later.
 2. Ask questions as necessary to fill the gaps.
 3. Wait until a person has finished explaining before writing it down.

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4. Check your understanding of what they have said with each person interviewed.
5. Discuss with everyone how to properly prevent a recurrence.

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Location (Site address, City, State)		
Date of Accident	Time of Accident	
Type of Accident		
Description of Accident		
Description of Injury	Injured Body Part	
Witness 1	Witness 2	Witness 3
Treatment or Referral	Property Damage if any	
Cause or Causes of Accident 1. 2.		
Corrective Action 1. 2. 3.		
Supervisor Comments		
Supervisor (Print):	Supervisor Signature:	Date:
Safety Director's Comments:		
Signature:		Date:

12. FIRST AID

PURPOSE

To establish the minimum emergency first aid requirements necessary at a work site.

RESPONSIBILITIES

The Safety Director is responsible *for*:

1. Determining the appropriate emergency medical facility (hospital or clinic)
2. Determining the appropriate ambulance service
3. Posting this information with telephone numbers at all telephones and other selected locations
4. Assuring that one person per 25 workers, trained in first aid and CPR, is at the work site at all times
5. Establishing a system to notify the trained employees if an injury occurs
6. Providing a complete first aid kit (the contents of a typical kit are listed).

Typical first aid kit:

Unit pack 36-unit first aid kit (special order):

Item	Number of Units
Adhesive Bandage 1 x 2-318	1
Butterfly 1	1
Bandage Compress 2"	2
Bandage Compress	3
Triangular Bandage	4
Zephiran Chloride	1
Ammonia Inhalant	1
Gauze Bandage 2" 6 yards	2
Adhesive Tape	1
Eye Dressing Kit	2
Tourniquet, Forceps, Scissors	1
Wound Wipes	1
Cold Packs	3
Rescue Blanket	1
Gauze Compress 3" x 3"	4
Gauze Compress 24" x 72"	1
Latex Exam Gloves I dozen	1
36 Unit Case	4

Supervisors are responsible for informing all employees about:

1. The emergency telephone numbers
2. The emergency procedures and
3. Inventorying and maintaining the first aid kit.

PROCEDURE

In all cases immediately call the emergency number.

1. Notify a designated first aider who is certified in first aid and CPR,
2. Do not move a victim.
3. Provide the appropriate emergency first aid (by trained employees only).
4. All employees must be aware of the following precautions for special situations:

Clothing Fire

- a. Prevent the victim from running.
- b. Roil the victim on the floor and wrap in a blanket or coat.
- c. Douse the victim with water or use an emergency shower.
- d. Do NOT remove wet or burned clothing from the victim's burned areas.

Burns from acid, caustics, or other chemicals

- a. Immediately move the victim under an emergency shower or running water.
- b. Keep the victim under the shower for a minimum of 20 minutes and remove clothing.
- c. In case of eye bums, hold victim's eyelid open and flush with water for 15 minutes from an eye bath, water fountain, or with a gentle stream from a water hose.
- d. Know the location of and how to operate emergency showers, eye baths and water hoses in your work area.

Exposure to vapors, fumes or gases

- a. Notify trained personnel to close valves and perform similar precautionary procedures.
- b. Move exposed people to fresh air as quickly as possible
- c. If fumes or gas have penetrated clothing and/or are causing skin irritation, immediately get victim under a shower and have clothing removed.
- d. Have all victims report to a physician for examination.
- e. Tell the physician the specific gas vapor or fumes involved and provide a material safety data sheet.
- f. Call Medical AT ONCE if any symptoms occur after working hours. Some fumes or gases have delayed action symptoms.

Electric Shock

- a. De-energize the circuit If not possible, use a nonconductor (dry wood, clothing) to remove the electrical source from the victim,
- b. If the victim is not breathing or does not have a pulse, first aider shall administer CPR.
- c. If the victim is in water, ensure that no exposed wires are in or near the water.
- d. Leave the victim ONLY if there is no other way to stop the current flow.

13. RECORD KEEPING AND POSTERS

GENERAL

Records must be maintained and kept up to date by the Supervisor at each job site and/or the Main Office. These records must be available for review at all times. The following records must be maintained:

1. Reports of all injuries and accidents (main office).
2. OSHA Log (*Form 30.*) (on site for each project and the main office).
3. Inspections (job site).
4. Minutes of training meetings, including names and signatures of employees who were present (job site).
5. Equipment preventative maintenance (main office).
6. Hazard Communications Program with material Safety Data Sheets and the NYS Right to Know Poster (job site).
7. OSHA Training Requirements Record (main office).
8. This manual (job site).
9. Emergency Telephone Numbers Poster (job site).
10. Mini Poster - includes Equal Employment Opportunity, Minimum Wage, Employee Polygraph Protection Notice and OSHA - Job Safety and Health (job site and main office).

The company's Equal Employment Policy and Invitation to Self-Identify (VETS) (job site and main office.)

14. SUBCONTRACTORS

PURPOSE

Establish the subcontractors' safety responsibilities or duties on the job site.

GENERAL

Each subcontractor is required to comply with provisions of the Occupational Safety and Health Administration standards, state, local and owner's regulations specific to this project.

RESPONSIBILITY

Permission and special instructions related to the safety and security of the job site must be secured before beginning work in any area on site.

Before any work is started, the insurance certificate and/or other permits that may be required by the public authorities or the client in connection with the performance of their contract shall be on file in the site Field Office.

Each subcontractor shall have a written Safety Program in place consistent with the Rochester area Construction Alliance. Listed below are safety rules and regulations as prescribed by federal, state, and local agencies. Compliance with these rules is required. This includes but is not limited to the following:

1. Furnish approved personal safety equipment for employees (hard hats, eye protection, safety harnesses, personal fall arrest equipment. etc.)
2. Provide training, instruction, and monitoring for personal protective equipment to work in hazardous locations or perform special projects.
3. Give instructions to all employees as to the nature of the work, hazards of the job, use of protective equipment, safety rules and site rules under which they will work.
4. Report all accidents and injuries immediately. Each subcontractor is responsible for filling out any required reports or records. Transportation of injured employees is the responsibility of the subcontractor. A copy of the subcontractor accident report and NY State C-2 Form must be submitted to owner's representative.
5. Follow the job site housekeeping rules dealing with proper disposal and storage of debris or materials.
6. Keep flammable liquids in approved safety containers and stored in specific areas as assigned with proper firefighting equipment.

7. Other fire protection and preventive measures are mandatory. This includes fire extinguishers, proper storage of materials and supplies, and other procedures to protect flammable or combustible materials or areas on site. The use of job made heaters is prohibited. Only approved heating devices are acceptable with no open fires or burning.
8. Each subcontractor will provide his/her own fire extinguishers to protect his/her own equipment, materials, buildings, storage and work areas. Fire extinguishers must be inspected and tagged at least annually.
9. All job site equipment such as trucks, motor cranes, fork lifts, boom trucks, etc., must meet all federal, state, local, and site regulations and should be equipped with fire extinguishers.
10. All scaffolds, work platforms, and open sided floors shall be protected with handrails and toe boards. Safety harnesses will be used for work being performed from elevated areas of greater than 6 feet.
11. Any trench, cut, or holes over 5 feet deep will be properly shored, sloped or otherwise protected. Access to and from such areas must be provided within 25 feet of where employees are working.
12. All trucks, cranes, bulldozers, and other mobile equipment shall be parked in designated areas and locked or otherwise secured after normal working hours.
13. Any work areas, confined or enclosed spaces shall be monitored for oxygen and/or hazardous gas, or ventilated before employees are allowed to enter. Such spaces will be identified, marked and proper access maintained with written daily records. Employees will be instructed as to the hazards and proper working procedure before entry into such areas. A Confined Space Permit is required from Owner's Representative.
14. Any work area that presents a hazard such as overhead work, open holes, etc. will be blocked off or barricaded.
15. All welding, cutting or hot work being performed will require protection from slag and/or sparks in the area under or close to such work. A hot work permit is required from Owner's Representative. A fire watch is required for 30 minutes after completion of hot work.
16. All outside buildings, trailers, tool rooms, fabrication shops or other buildings will be properly erected and fire protection will be provided.
17. Any hazardous materials used in the performance of the work will be listed with a Hazardous Material Data Sheet from the manufacturer and filed in the Field Office. Subcontractors will instruct their employees in the proper use *and/or* disposal of hazardous material.

D I F I O R E C O N S T R U C T I O N S A F E T Y & H E A L T H P L A N

18. All tools and equipment brought onto the site for subcontractor use are subject to inspection and approval by the Owners Representative.
19. Loaning of tools and equipment to other subcontractors is not recommended due to the possibility of faulty equipment and liability that follows the piece of equipment.
20. Subcontractors must inspect the work site on a daily basis, inspecting tools and equipment, housekeeping, fire hazards, fall hazards and other exposures to hazardous conditions.
21. All of the above procedures are mandatory for all contractors as well as their subcontractors, if any. These are only minimum requirements and should be used as a guide to a safe site.
22. Any disciplinary actions as prescribed by site procedures will be strictly enforced.

15. MULTI-EMPLOYER WORK SITES

GENERAL

Primary means of controlling subcontracted work rests with the provisions stipulated in the Subcontract Document. Subcontractor's poor performance can have a substantial effect on project costs long after job completion. OSHA has developed a Multi Employer Work Site requirement as shown below that we will follow so each subcontractor is under the same guidelines.

PURPOSE

This section establishes a line of responsibility for controlling hazards created by each subcontractor on site.

RESPONSIBILITIES

- The employer whose employees are exposed to the hazard.
- The employer who created the hazard,
- The controlling employer or owner on site who would have responsibility for correcting the hazard, and/or .
- The employer responsible for correcting the hazard

Will be held accountable for correcting and maintaining a safety device so that no worker is exposed to a hazard. In some cases, a hazard may be corrected by one subcontractor and then maintained by the subcontractor responsible for that particular area as per the contract.

Any subcontractor removing a safety device is responsible to replace that device immediately and in some cases will become responsible to see that the device is maintained as long as they are working in the area.

The elevator workers remove a guardrail across an elevator opening. The elevator subcontractor is then responsible to maintain the guardrail until completion of their work.

Contract work shall not begin until a safe procedure of operation has been established with the Owners Representative specific to your project.

16. LOCKOUT AND TAGOUT

PURPOSE

This procedure establishes the requirements for energy isolating lockout-tagout program. This procedure will be used to ensure that all machines and equipment are isolated from potentially hazardous energy. These machines will be locked and tagged before any employee performs any service or maintenance if unexpected energization, startup, or release of stored energy could cause injury.

RESPONSIBILITY

The Safety Director has responsibility for the lockout-tagout program. The authorized lockout-tagout coordinator (usually the supervisor) is in charge of the lockout-tagout procedure and is responsible for helping other employees locate, lock and tag valves, switches, etc., with the owners' authorized representative.

TRAINING

Each employee who will be involved in lockout-tagout shall be given training by the designated lockout-tagout coordinator before performing work on any mechanical, electrical, etc. system.

PREPARATION FOR LOCKOUT-TAGOUT

The Project Manager/Superintendent should conduct a survey to locate and identify all energy isolating devices. They should be certain which switches, valves or other isolating devices apply to the equipment. The lockout-tagout procedure involves, but is not limited to, electricity, motors, steam, natural gas, compressed air, hydraulic systems, ditches, sewers. etc.

LOCKOUT-TAGOUT RESTRICTIONS

1. The isolating devices locked and tagged must include all of the devices that control energy, must be singularly identified and must not be used for any other purpose.
2. Locks, hasps and tags must be able to withstand any kind of adverse environment in which they may be used. Tags that are to be located in adverse conditions must not deteriorate making the message illegible.
3. Lockout requirements are not met by the removal of fuses.

4. Locks and tags are not to be removed by any person other than the individual who applied the locks.
5. No employee shall rely on another employee's lock and tag.

SEQUENCE OF LOCKOUT-TAGOUT SYSTEM

1. The Lockout-Tagout log (optional) is to be completed before beginning any work. The tag shall consist of the following information:
 2. Date and time of installation and removal of locks and tags
 - Name of the employee who applied the lock and tag
 - Name of the employee's employer
 - Machine or apparatus being disconnected and locked out
 - Purpose for locking and tagging the system(s)
 - Lock number
 - Authorization to proceed with work duties
 3. If Lock Out procedure has been written for this equipment it should be followed.
 4. Notify all affected employees that a lockout-tagout system is going to be used and the reason for it. The authorized employee shall know the type and magnitudes of energy connected to the machine or equipment and understand the hazards.
 5. If the machine or equipment is operating, shut it down by the normal stopping procedure (depress stop button, open toggle switch, etc.).
 6. Operate all switches, valves, or other energy isolating devices so that the equipment is totally isolated from its energy sources. Stored energy (such as that in springs, elevated machine members, rotating flywheels, hydraulic systems, and air, gas, steam or water pressure. etc.) must be dissipated or restrained by methods such as repositioning, blocking, bleeding, disconnecting, etc.
 7. Place a lock on each energy isolating device. Only authorized employees may attach the locks. The locks must hold the energy isolating devices in a "safe" or "off" position. Attach "Danger - Do Not Operate" tags to each lock. On the tag, write the name of employee, employer, and date of attachment.

8. If more than one individual is required to lockout and tag the equipment, each person must place a separate lock and tag on each energy isolating device. When an energy isolating device cannot accept multiple locks or tags, a multiple lock hasp must be used. Individual locks are removed as each person no longer needs to maintain lockout protection.

NO EMPLOYEE MAY REMOVE THE LOCK OF ANOTHER EMPLOYEE.

1. After verifying that no personnel are exposed, check on having disconnected the energy sources by operating the push button or other normal operating controls to make certain the equipment will not operate.
2. The system is now properly locked out. CAUTION: Return operating control(s) to neutral or “off” position after the test.
3. Implement a tagout system if a lock cannot be utilized. The tag is to be attached so it will clearly indicate that the operation or movement of energy isolating devices from the “safe” or “off” position is prohibited. Employees are to be trained in the following limitations of the tagout system:
 - a. Tags are warning devices and do not provide the physical restraint a lock does.
 - b. Tags are not to be removed without authorization of the authorized person responsible for them.
 - c. Tags must be legible, understandable and made of a material which will withstand the environmental conditions; and
 - d. Tags are to be securely attached so that they cannot be inadvertently or accidentally detached during use.
4. Where a tag cannot be attached directly to the energy isolating device, the tag is to be located as close as safely possible to the device in a position immediately obvious to anyone attempting to operate the device.

SEQUENCE FOR RESTORING MACHINES TO NORMAL OPERATION

1. When working on equipment that requires “inching” or “jogging” to move parts for adjustment or maintenance, special attention at the energy source must be continued until work is completed. Special attention involves an employee stationed at the primary disconnect switch (the energy source) during “inching” and “jogging”. In the event the secondary switch should fail he would switch the primary disconnect off.

2. After the servicing and/or maintenance are complete and equipment is ready for normal production operations, check the area around the machines or equipment to ensure that no one is exposed.
3. After checking that all tools have been removed from the machines or equipment, guards have been reinstalled and employees are in the clear, notify the designated lockout-tagout coordinator before the removal of the tag and lock.
4. After authorization is given, remove all locks and lags. Operate the energy isolating devices to restore energy to the machine or equipment.

IF AN EMPLOYEE FORGETS TO REMOVE A LOCK AND TAG

No employee may remove the lock and tag of another employee. The only exception to this is if an employee has forgotten to remove a lock and as not available to do so. The designated lockout-tagout coordinator is the only person who may remove a lock or tag. and then Only after verifying that:

1. It is safe to restore the energy to the machine or equipment,
2. The authorized employee who applied the device is not at the facility,
3. All reasonable efforts are made to contact the authorized employee,
4. The authorized employee knows his or her lock and tag were removed before he or she resumes work at that facility.

DEFINITIONS

AFFECTED EMPLOYEE:

An employee whose job requires operation or normal use of a machine or piece of equipment which may be locked out, or one whose job requires work in an area where a machine is locked out.

AUTHORIZED AND DESIGNATED LOCKOUT-TAGOUT COORDINATOR:

A person authorized and designated by the project manager or project superintendent for contacting the owner's authorized representative to identify all systems to be Locked/tagged out, and then assist other authorized employees to locate and lockout-tagout valves, switches etc.

AUTHORIZED EMPLOYEE:

A person who locks out and tags or tags out a machine or piece of equipment in order to perform service or maintenance on that machine or piece of equipment. An authorized employee and an affected employee may be the same person when the affected employee's duties also include performing maintenance or service on a machine, which must be locked out.

CAPABLE OF BEING LOCKED OUT:

An energy isolating device is capable of being locked out:

1. If it can be held in the off or safe position by placing a lock, hasp or similar part into it.
2. If it has a built in lock which holds the device in the off or safe position, and/or
3. If a lock can be placed to hold the device in the off or safe position without need to dismantle, rebuild, or replace the energy isolating device or permanently alter its energy control capability.

ENERGY ISOLATING DEVICE:

A mechanical device that physically prevents the transmission or release of energy, such as:

1. valves,
2. manually operated electrical circuit breakers,
3. disconnect switches,
4. blocks,
5. any similar device used to block or isolate energy.

The term does not include a push button, selector switch, and other devices.

ENERGY SOURCE:

Any electrical, mechanical, hydraulic, pneumatic, chemical, thermal, or other energy.

LOCKOUT:

The placement of a lock and tag on an energy isolating device, in accordance with an established procedure, so the energy isolating device and the equipment being controlled cannot be operated until the lock is removed.

SERVICE AND/OR MAINTENANCE:

Workplace activities such as constructing, installing, setting up, adjusting, inspecting, modifying, and maintaining and/or servicing machines or equipment. These activities include lubrication, cleaning, un-jamming, adjustments or tool changes, where the employee may be exposed to unexpected energizing, start up, or a release of hazardous energy.

TAG:

A prominent warning device which can be securely fastened to an energy isolating device to indicate that the energy isolating device and the equipment being controlled may not be operated until the tag is removed. The tag must include the name of the employer, name of employee, and date of attachment.

17. CONFINED SPACE PROGRAM

PURPOSE

DiFiore Construction does not normally engage in work or activities requiring confined space entry. The information provided here is to be used by DiFiore employees that may encounter situation with which they are not familiar. In all situations employees are not to engage in confined space entry until they are thoroughly trained in the contents of this section which is designed to provide maximum protection for employees assigned to enter and work in confined spaces.

RESPONSIBILITIES

The supervisor is responsible for determining that the air in the confined space is safe to breath and to work in, and that the air is continually monitored. The supervisor must review all light sources within the confined space with the entering employee to ensure that all equipment can be sufficiently and safely used.

Before entering the confined space, the employee must obtain and fully understand instructions from his supervisor; he must also post the Confined Space Entry Permit to alert alt other employees to the work being done in the area.

All employees working in the confined space area must be trained in the use of harnesses, lifelines, respiratory equipment and monitoring equipment, and must notify the supervisor of any questions or concerns.

DEFINITION

- A confined space is any space having the following characteristics:
- Is large enough end so confined that an individual can bodily enter and perform assigned work:
- Has limited or restricted means of entry or exit; and
- Is not designed for continuous employee occupancy.

Confined spaces may Include:

Boilers	Manholes
Pits	Vaults
Tunnels	Sewers
Furnaces	Diked Areas
Silos	Septic Tanks
Storage Bins	Hoppers
Vessels	Process Vessels

Digesters
Tank Cars
Cisterns

Pumping Stations
Wells

HAZARDS

1. Hazards of confined spaces
 - a. Hazardous atmospheres
 - b. Oxygen deficiency or oxygen enrichment
 - i. Combustible/flammable, explosive gases and vapors
 - ii. Toxic gasses or vapors
 - iii. Combustible dust
 - c. Engulfment hazards
 - d. Entrapment or configuration hazards
 - e. Mechanical hazards
 - f. Other hazards
 - i. Corrosive chemicals
 - ii. Electrical
 - iii. Access with ladders
 - iv. Lighting (poor visibility
 - v. Temperature extremes
 - vi. Falling/tripping insecure footing
 - vii. Falling objects
 - viii. Weather conditions
2. How confined space hazards occur
 - a. Confined space hazards occur as a result of both natural and man-made sources
 - b. Sources of confined space hazards include:

- i. Chemical reactions from products stored in vessel
- ii. Oxidation/reduction reactions (i.e., rusting of metals)
- iii. Decomposition of organic matter
- iv. Cleaning reagents (solvents, acids)
- v. Welding, spray painting, grinding, brazing, sandblasting
- vi. Inerting with non-flammable gasses
- vii. Fire and explosion hazards from organic hydrocarbon based substances
- viii. Ignition sources from static electricity, hot work operations, electrical equipment
- ix. Lack of proper training
- x. Loose materials stored in tank (grain, sawdust, etc.)
- xi. Pyrophoric chemicals

IDENTIFICATION OF CONFINED SPACES

A. Existing Facilities

If work is to be performed in an existing facility, the owner shall have the responsibility of identifying confined spaces within that facility. Prior to beginning work, the Superintendent shall contact the owner to determine the location of all confined spaces within the work area. If confined spaces are present in the facility, the owner will inform the contractor of any known hazards the owner has experienced within the confined spaces and of any precautions that have been instituted by the owner to protect employees in or near the permit space. Upon receipt of information from the owner, the permit space program will be adapted to address the specific hazards associated with each space.

Where it is necessary for employees of the contractor and the owner to work simultaneously in a space, the owner will be responsible for the development and implementation of procedures to coordinate entry operations. Employees of the contractor will follow the procedures of the owner in cooperating with their efforts to coordinate entry operations if both parties will have personnel working in the space.

All information pertaining to confined spaces should be provided by the owner to the contractor in writing.

At the conclusion of activities within a confined space, personnel should be prepared to brief the owner on any hazards encountered or created while working in the confined space.

B. New Construction

The contractor's jobsite Superintendent will be responsible for identifying confined spaces. Spaces which fall within the definition of a confined space shall be treated as such and operations will follow the entry procedures outlined below.

ENTRY PROCEDURES

No person shall enter a confined space without first being instructed as to the nature of the hazards involved, the necessary precautions to be taken, and in the use of protective and emergency equipment required. The following procedures must be followed to provide for the safety of all personnel working within a confined space.

A. Authorization

All persons assigned to enter a confined space must first obtain instruction from their Superintendent and a Confined Space Entry Permit Form (see page 1 7-9). The permit is to be entirely completed and reviewed and signed by the Superintendent to authorize entry before any work in a confined space begins. The duration of the permit shall not exceed the time required to complete the task. Should the job last longer than one shift, a new permit must be issued at the beginning of each shift. The permit's duration can be stated in terms of a specific task lobe performed, for example, the removal and installation of a relief valve. The permit must be posted outside the confined space to inform others that an employee is working inside. All permits must be filed in the jobsite office upon their expiration. Permits should be maintained for a period of one year to allow for an annual review of this Confined Space Entry Program.

B. Atmospheric Testing

The atmosphere in the confined space must be tested prior to entry and continuously monitored while the confined space is occupied. Only personnel trained in the use of air-monitoring equipment and its limitations will be permitted to perform pre-entry testing. Air-monitoring equipment must be calibrated prior to each use unless otherwise specified by its manufacturer. Before entry into the confined space, the atmosphere must test within the acceptable ranges as outlined below. It is important to remember that due to the intrinsic limitations of air monitoring, devices, testing must be performed in the order listed below.

Order	Substance	Acceptable Level
1	Oxygen	19.5% - 23.5%
2	Explosive Gas or vapor	<10% LFL
3	Explosive dust	<LFL (5 ft. visibility)
4	Carbon Monoxide (CO)	50 ppm
5	Hydrogen Sulfide	10 ppm

All readings should be recorded on the entry permit (see page 17-10). If any values fall outside the acceptable range, appropriate corrective actions should be taken. Where additional substances may exist, the appropriate tubes and testing equipment should be used to assure airborne concentrations are within the acceptable range. This range, referred to as the *PEL* or *TWA*, can usually be found on the MSDS for the material generating the airborne substance.

Where testing reveals an unsafe atmosphere, appropriate equipment must be used to purge and ventilate the space. If readings cannot be brought into acceptable levels and entry is absolutely necessary, then a self-contained breathing apparatus (SCBA) must be used.

In the event the audible alarm or flashing lights on the monitor are activated, the entrant must exit the confined space immediately. The exception to this rule is if the person is wearing a SCBA.

NOTE: If a flammable atmosphere is present in the confined space, employees must use spark-proof hand tools and explosion-proof equipment.

C. Completion of Entry Permit

Upon completion of the air monitoring, the remainder of the Confined Space Entry Permit (see page 17-10) may be completed. All items on the permit must be filled in. Wherever possible, observations necessary to complete the entry permit should be made from outside the confined space. Following are procedures which must be completed and logged onto the permit prior to confined space entry:

1. Before working in the confined space, flange off all incoming and outgoing pipes and lockout all valves and electrical equipment. Lockout and tag all valves in accordance with the tockout-tagout procedure.

2. All mechanical equipment must also be tagged out and/or blocked to prevent accidental startup of equipment.
3. Once an entrance cover is removed, the opening must be promptly guarded by a railing, temporary cover, temporary fence, or other temporary barrier to prevent individuals from falling into a space and to protect the entrant from falling materials.
4. A means of communication between the entrant and the attendant must be established. Communication may be by voice, radio, visual, or rope.
5. Appropriate personal protective equipment must be selected to protect the entrant from any hazards inside the space,
6. Appropriate rescue equipment must be provided to be used in emergency situations.
7. Names and numbers of emergency response services must be provided.
8. An adequate lighting source must be provided which is appropriate for conditions inside the space.

D. Emergency Rescue Procedures

Under no circumstances are personnel expected to enter a confined space where hazards have not been eliminated or effectively controlled, although unexpected situations might arise that prevent entrants from self rescue. In response, the following rescue and emergency action plan has been developed and will be strictly enforced. The contractor will decide whether to utilize off-site entry rescue services in the event rescue is not possible. Non-entry rescue shall be the first and primary option for emergency rescue.

At no time shall a person enter the confined space for rescue purposes without:

1. Another person stationed outside,
2. An approved respirator appropriate for the hazards which may be encountered.
3. A lifeline, and
4. A safety harness.

E. Attendant

An attendant, who should be trained in first aid and CPR, shall be stationed outside of a confined space at all times during entry operations to monitor activities inside and outside the space. The attendant must order evacuation of the space if he:

1. detects a prohibited condition;
2. detects behavioral effects manifested from exposure to atmospheric hazards in the

authorized entrant;

3. detects a condition outside the space that could endanger the authorized entrant; or
4. cannot effectively and safely perform all required duties of an attendant.

F. Smoking

Smoking is prohibited inside of and within twenty (20) feet of the confined space.

G. Welding Within a Confined Space

If welding is to be performed in confined spaces that did or do contain combustibles, all residues, including dry scale or sediment, must be removed. If it is not possible to remove all combustible materials, they must be covered by a non-combustible blanket.

The following specific procedures are required when welding is performed in a confined space:

1. Welding electrodes must be removed from their holders during suspension of work (e.g. during lunch or overnight). The welding machine must be disconnected from its power source.
2. Mechanical ventilation must be provided.
3. Compressed gas cylinders and welding machines must be left outside the confined space.
4. Portable equipment on wheels must be secured to prevent accidental movement.
5. Gas welding and cutting equipment, such as hoses, connections, torches. etc.. must be inspected and tested to ensure their integrity.
6. Means must be available for the quick removal of a welder in the event of an emergency. A full body harness must be used whenever its use will facilitate rescue.
7. An attendant with a pro-planned rescue procedure must be stationed outside the space.
8. Torch valves must be closed and the fuel gas and oxygen supply positively shut off at some point outside the space when the torch is not being used for a substantiated amount of time. Additionally, the torch and hose must also be removed from the confined space where practicable.
9. Warning signs should be posted warning of hot metal after welding is completed.
10. Welders and helpers must use appropriate respiratory protection when ventilation controls are insufficient.
11. Never use oxygen to ventilate a confined space.

H. Multi-employer Permit Space Entry Operations

Where employees of the contractor and those of another employer are required to work simultaneously within a confined space, efforts will be made to cooperate with the operations of other employers so no employees are endangered.

I. Fire Protection

At least one 20 lb. ABC multi-purpose fire extinguisher must be available for instant use in a confined space containing flammable gases or vapors.

J. Training

Every individual involved in confined space entry will receive initial and annual refresher training. The training will be specific to the duties the employee will perform and the procedures and practices necessary to protect them from the dangers of the permit space.

Training will be based on the responsibilities of each individual as outlined below:

Authorized entrants will be trained to:

1. Know the hazards associated with the permit space and their effects.
2. Properly use the equipment required for entry,
3. Maintain a continuous means of communication with the attendant.
4. Alert the attendant in the event of an emergency.
5. Evacuate the space if an emergency occurs.

Attendants will be trained to:

1. Know the hazards associated with (the permit space and their effects.
2. Maintain an accurate account of the authorized entrants.
3. Remain in their assigned station until relieved by another attendant or until the permit space entry is complete.
4. Monitor conditions in and around the permit space.
5. Summon rescue and applicable medical services in the event of an emergency.
6. Perform non-entry rescue procedures.
7. Perform appropriate measures to prevent unauthorized personnel from entering the permit space.

Superintendents will be trained to:

1. Know the hazards associated with the permit space and their effects.
2. Verify that the safeguards required by the permit have been implemented.
3. Verify that rescue services are available and that means for summoning them are operable.
4. Cancel the written permit and terminate the permit space entry when required.
5. Remove personnel who are not authorized to enter the permit space during entry operations.
6. Periodically determine that the entry operation is being performed in a manner

consistent with the requirements of the permit space entry procedures and that acceptable entry conditions are maintained.

All personnel involved in confined space entry will receive training in:

- 1 Types of confined space hazards
2. Components of the confined space program
3. Components of the entry permit system.
4. Safe confined space welding practices.
5. The need for prompt guarding of the entrance opening.
- 6 Atmospheric testing equipment including its use, calibration and maintenance.
7. Atmospheric testing protocol:
 - a. Oxygen, combustibles, toxics
 - b. Pre-entry, frequent or continuous testing
 - c. Check of all levels of the space
8. Methods for the control or elimination of any atmospheric hazards:
 - a. Draining and rinsing
 - b. Purging and cleaning
 - c. Continuous forced air ventilation
9. Procedures employees must follow if they detect a hazard.
- 10 The evaluation process to be used for reentry if hazards are detected.
11. Training employees on the use of entry equipment.
12. Personal protective equipment required:
 - a. Full body harness
 - b. Respiratory protection
 - c. Eye and face equipment
 - d. Protective clothing

Confined Space Entry Permit

Date and Time:			Project Name:			
Permit Expiration Time:						
Permit Space Location and Description:						
Purpose of Entry:						
Pre-Entry Checklist						
Note: The entire form must be completed prior to entry into the confined space.						
1. Atmospheric testing to be conducted in following order:						
	A.	Order	Substance	Acceptable Level	Readings	Acceptable
		1	Oxygen (O2)	19.5% - 23.5%		Yes No
		2	Explosive Gas or Vapor	<10% LFL		Yes No
		3	Explosive Dust	<LFL (5ft. Visibility)		Yes No
		4	Carbon Monoxide	<50 ppm		Yes No
		5	Hydrogen Monoxide	<10 ppm		Yes No
		6	Other			Yes No
		7	Other			Yes No
	B.	Continuous forced air ventilation in place where required?			NA	Yes No
	C.	Are explosion-proof tools and equipment required?			NA	Yes No
	D.	Is a 20lb. ABC extinguisher present where required?			NA	Yes No
2.	Control of Hazardous Energy				NA	Yes No
	A.	Are all lines to vessel locked out – broken – capped – or blanked?			NA	Yes No
	B.	Are all switches and valves locked or tagged out?			NA	Yes No
	C.	Is all mechanical equipment locked out or tagged to prevent accidental startup?			NA	Yes No
3.	Is opening to confined space adequately protected?				NA	Yes No
4.	Is a means of communication established between entrant and attendant?				NA	Yes No
5.	Is entrant equipped with appropriate personal protective equipment?				NA	Yes No
6.	Is each entrant equipped with a harness and lifeline for emergency rescue operations?				NA	Yes No
7.	Are the names and numbers of emergency rescue services readily available?				NA	Yes No
8.	Is an adequate lighting source, safe for conditions in the space, provided?				NA	Yes No
9.	Will welding operations be performed within the space? If "Yes", a Confined Space Hot Work Permit must be completed.				NA	Yes No
10.	Have all personnel received the appropriate training for their duties.				NA	Yes No
IF NO IS MARKED FOR ANY ITEM, ENTRY OPERATIONS MAY NOT PROCEED						
Superintendent Entry Authorization:						
Signature of Attendant:						
Signature of Entrants:						

18. TRENCHING AND EXCAVATION

PURPOSE

This program outlines procedures and guidelines for the protection of employees working in and around excavations and trenches. This program requires compliance with OSHA Standards described in Subpart P (CFR 1926.650) for the construction industry. Compliance is mandatory to ensure employee protection when working in or around excavations. The programs in this manual on confined space, hazard communication, lock-out/tag-out, respiratory protection, and any other safety programs or procedures deemed essential for employee protection, are to be used in conjunction with this program.

SCOPE

This program pertains to all DiFiore Construction projects that require any excavations or trenches.

REFERENCES

29 CFR 1926.650. Subpart *P* - Excavations
Excavation Equipment Manufacturer Safety Procedures

RESPONSIBILITIES

This the responsibility of each superintendent and supervisor to implement and maintain the procedures and steps set forth in this program. Each employee involved with excavation and trenching work is responsible to comply with all applicable safety procedures and requirements of this program.

DEFINITIONS

BENCHING - A method of protecting employees from cave-ins by excavating the sides of an excavation to form one or a series of horizontal levels or steps, usually with vertical or near vertical surfaces between levels.

CAVE-IN - The separation of a mass of soil or rock material from the side of an excavation, or the loss of soil from under a trench shield or support system, and its sudden movement into the excavation, either by failing or sliding,, in sufficient quantity so that it could entrap, bury, or otherwise injure and immobilize a person.

COMPETENT PERSON - One who is capable of identifying existing and predictable hazards in the surroundings or working conditions, which are unsanitary, hazardous, or

dangerous to employees, and who has authorization to take prompt corrective measures to eliminate them.

DURATION OF EXPOSURE - The longer an excavation is open, the longer the other factors have to work on causing it to collapse.

EXCAVATION - Any man-made cut, trench, or depression in an earth surface, formed by earth removal.

HAZARDOUS ATMOSPHERE - An atmosphere which by reason of being explosive, flammable, poisonous, corrosive, oxidizing, irritating, oxygen deficient, toxic, or otherwise harmful, may cause death, illness, or injury.

PROTECTIVE SYSTEM - A method of protecting employees from cave-ins, from material that could fall or roll from an excavation, or from the collapse of adjacent structures. Protective systems include support systems, sloping and benching systems, shield systems, and other systems that provide necessary protection.

SHIELD - A structure that is capable of withstanding the forces imposed on it by a cave-in and thereby protects employees within the structure. Shields can be permanent structures or can be designed to be portable and moved along as work progresses. All shields must be in accordance with 29 CFR 1926.652(c)3 or (c)4.

SLOPING - A method of protecting workers from cave-ins by excavating to form sides of an excavation that are inclined away from the excavation to prevent cave-ins. The angle of incline required to prevent a cave-in varies with differences such as soil type, length of exposure, and application of surcharge loads.

SURCHARGE LOADS - Generated by the weight of anything in proximity to the excavation, push starts for a cave-in (anything up top pushing down). Common surcharge loads:

- weight of spoil pile
- weight of nearby buildings, poles, pavement, or other structural objects.
- weight of material and equipment

TRENCH - A narrow excavation below the surface of the ground, less than 15 feet wide, with a depth no greater than the width.

UNDERMINING - Undermining can be caused by such things as leaking, leaching, caving or over-digging. Undermined walls can be very dangerous

VIBRATION - A force that is present on construction sites and must be considered. The vibrations caused by backhoes, dump trucks, compactors and traffic on job sites can be substantial.

GENERAL REQUIREMENTS

Before any work is performed and before any employees enter the excavation, a number of items must be checked and insured:

- Before any excavation, underground installations must be determined. This can be accomplished by either contacting the local utility companies or the local “on- call” center for the area. All underground utility locations must be documented on the proper forms. All overhead hazards (surface encumbrances) that create a hazard to employees must be removed or supported to eliminate the hazard.
- If the excavation is to be over 20 feet deep, it must be designed by a registered professional engineer who is registered in the state where work will be performed.
- Adequate protective systems will be utilized to protect employees. This can be accomplished through sloping, shoring, or shielding.
- The worksite must be analyzed in order to design adequate protection systems and prevent cave-ins. There must also be an excavation safety plan developed to protect employees.
- Workers must be supplied with and wear any personal protective equipment deemed necessary to assure their protection.
- All spoil piles will be stored a minimum of four (4) feet from the sides of the excavation the spoil pile must not block the safe means of egress.
- If a trench or excavation is 4 feet or deeper, stairways, ramps, or ladders will be used as a safe means of access and egress. For trenches, the employee must not have to travel any more than 25 feet of lateral travel to reach the stairway, ramp, or ladder.
- No employee will work in an excavation where water is accumulating unless adequate measures are used to protect the employees.
- A competent person will inspect all excavations and trenches daily, prior to employee exposure or entry, and after any rainfall, soil change, or any other time needed during the shift. The competent person must take prompt measures to eliminate any and all hazards.

- Excavations and trenches 4 feet or deeper that have the potential *for* toxic substances or hazardous atmospheres will be tested at least daily. If the atmosphere is inadequate, protective systems will be utilized.
- If work is in or around traffic, employees must be supplied with and wear orange reflective vests. Signs and barricades must be utilized to ensure the safety of employees, vehicular traffic, and pedestrians.

COMPETENT PERSON RESPONSIBILITIES

The OSHA Standards require that the competent person must be capable of identifying existing and predictable hazards in the surroundings, or working conditions which are unsanitary, hazardous, or dangerous to employees, and have authorization to take prompt corrective measures to eliminate them and, if necessary, to stop the work.

A competent person is required to:

- Have a complete understanding of the applicable safety standards and any other data provided.
- Assure the proper locations of underground installations or utilities, and that the proper utility companies have been contacted.
- Conduct soil classification tests and reclassify soil after any condition changes.
- Determine adequate protective systems (sloping, shoring, or shielding systems) for employee protection.
- Conduct all air monitoring for potential hazardous atmospheres.
- Conduct daily and periodic inspections of excavations and trenches.
- Approve design of structural ramps, if used.

EXCAVATION SAFETY PLAN

An excavation safety plan is required in written form, This plan is to be developed to the level necessary to insure complete compliance with the OSHA Excavation Safety Standard and state and local safety standards.

Excavation safety plan factors:

- Utilization of the local one-call system
- Determination of locations of all underground utilities
- Consideration of confined space atmosphere potential

- Proper soil protection systems and personal protective equipment and clothing
- Determination of soil composition and classification
- Depth of excavation and length of time it will remain open
- Proper adherence to all OSHA Standards, this excavation and trenching safety program, and any other coinciding safety programs.

SOIL CLASSIFICATION AND IDENTIFICATION

The OSHA Standards define soil classifications within the Simplified Soil Classification Systems, which consist of four categories: Stable rock, Type A, Type B, and Type C. Stability is greatest in stable rock and decreases through Type A and B to Type C. which is the least stable. Appendix A of the Standard provides soil mechanics terms and types of field tests used to determine soil classifications.

Stable rock is defined as natural solid mineral matter that can be excavated with vertical sides and remain intact while exposed.

Type A soil is defined as:

- Cohesive soils with an unconfined compressive strength of 1.5 tons per square foot (TSF) or greater.
- Cemented soils like caliche and hardpan are considered Type A.

Soil Is NOT Type A If:

- It is fissured.
- The soil is subject to vibration from heavy traffic, pile driving or similar effects.
- The soil has been previously disturbed.
- The material is subject to other factors that would require it to be classified as a less stable material.
- The exclusions for Type A most generally eliminate it from most construction situations.

Type B soil Is defined as:

- Cohesive soil with an unconfined compressive strength greater than .5 TSF. but less than 1.5 TSF.
- Granular cohesionless soil including angular gravel, silt, silt loam, and sandy loam.
- The soil has been previously disturbed except that soil classified as Type C soil.
- Soil that meets the unconfined compressive strength requirements of Type A soil, but is fissured or subject to vibration.
- Dry rock that is unstable.

Type C soil Is defined as:

- Cohesive soil with an unconfined compressive strength of .5 TSF or less.
- Granular soils including gravel, sand and loamy sand.
- Submerged soil or soil from which water is freely seeping.
- Submerged rock that is not stable.

Soil Test & Identification

The competent person will classify the soil type in accordance with the definitions in Appendix A on the basis of at least one visual and one manual analysis. These tests should be run on freshly excavated samples from the excavation and are designed to determine stability based on a number of criteria: the cohesiveness the presence of fissures, the presence and amount of water. The unconfined compressive strength, the duration of exposure, undermining, and the presence of layering, prior excavation and vibration

The cohesion tests are based on methods to determine the presence of clay. Clay, Silt, and sand are size classifications, with clay being the smallest sized particles, silt intermediate and sand the largest. Clay minerals exhibit good cohesion and plasticity (can be molded), Sand exhibits no elasticity and virtually no cohesion unless surface wetting is present. The degree of cohesiveness and plasticity depend on the amounts of all three types and water.

When examining the soil, three questions must be asked: Is the sample granular or cohesive? Fissured or non-fissured? What is the unconfined compressive strength measured in TSF?

Methods of testing soils

- Visual test: If the excavated soil is in clumps, it is cohesive. If it breaks up easily, not staying in clumps, it is granular.
- Wet manual test: Wet your fingers and work the soil between them. Clay is a slick paste when wet, meaning it is cohesive. If the clump falls apart in grains, it is granular.
- Dry strength test: Try to crumble the sample in your hands with your fingers. If it crumbles into grains, it is granular. Clay will not crumble into grains. only into smaller chunks.
- Pocket penetrometer test: This instrument is most accurate when soil is nearly saturated. This instrument will give unconfined compressive strength in tons per square foot. The spring-operated device uses a piston that is pushed into a coil up to a calibration groove. An indicator sleeve marks and retains the reading until it is read. The reading is calibrated in tons per square foot (TSF) or kilograms per cubic centimeter.
- Thumb penetration test. The competent person attempts to penetrate a fresh sample with thumb pressure. If the sample can be dented, but penetrated only with great effort, it is Type A. If it can be penetrated several inches and molded by light pressure, it is Type C. Type B can be penetrated with effort and molded.
- Shearvane: Measures the approximate shear strength of saturated cohesive soils. The blades of the vane are pressed into a flat section of undisturbed soil, and the knob is turned slowly until soil failure. The dial is read directly when using the standard vane. The results will be in tons per square foot or kilograms per cubic centimeter.

The competent person will perform several tests of the excavation to obtain consistent, supporting data along its depth and length. The soil is subject to change several times within the scope of an excavation and the moisture content will vary with weather and job conditions. The competent person must also determine the level of protection based on what conditions exist at the time of the test, and allow for changing conditions.

EXCAVATION PROTECTION SYSTEMS

The three basic protective systems for excavations and trenches are sloping and benching systems, shoring, and shields.

The protective systems shall have the capacity to resist without failure all loads that are intended or could reasonably be expected to be applied to or transmitted to the system. Every employee in an excavation shall be protected from cave-ins by an adequate protective system.

Exceptions to using protective system:

- Excavations are made entirely in stable rock
- Excavations are less than 5 feet deep and declared safe by a competent person

SLOPING AND BENCHING SYSTEMS

There are four options for sloping:

- Slope to the angle required by the Standard for Type C, which is the most unstable soil type.
- The table provided in Appendix B of the Standard may be used to determine the maximum allowable angle (after determining the soil type).
- Tabulated data prepared by a registered professional engineer can be utilized.
- A registered professional engineer can design a sloping plan for a specific job. Sloping and benching systems for excavations five (5) to twenty (20) feet in depth must be constructed under the instruction of a designated competent person. Sloping and benching systems for excavations greater than twenty (20) feet must be designed and stamped by a registered professional engineer. Sloping and benching specifications can be found in Appendix B of the OSHA Standard (Subpart P).

SHORING SYSTEMS

Shoring is another protective system or support system. Shoring utilizes a framework of vertical members (uprights), horizontal members (whales), and cross braces to support the sides of the excavation to prevent a cave-in. Metal hydraulic, mechanical or timber shoring is common examples.

The different examples of shoring (not Included here) are found in the OSHA Standard under these appendices:

APPENDIX C - Timber Shoring for Trenches

APPENDIX D - Aluminum Hydraulic Shoring for Trenches

APPENDIX E - Alternatives to Timber Shoring

SHIELD SYSTEMS (Trench Boxes)

Shielding is the third method of providing a safe workplace. Unlike sloping and shoring, shielding does not prevent a cave-in. Shields are designed to withstand the soil forces caused by a cave-in and protect the employees inside the structure. Most shields consist of two flat, parallel metal walls that are held apart by metal cross braces.

Shielding design and construction is not covered in the OSHA Standards. Shields must be certified in design by a registered professional engineer and must have either a registration plate on the shield or registration papers from the manufacturer on file at the jobsite office. **ANY REPAIRS OR MODIFICATIONS MUST BE APPROVED BY THE MANUFACTURER.**

SAFETY PRECAUTIONS FOR SHIELD SYSTEMS

- Shields must not have any lateral movement when installed.
- Employees will be protected from cave-ins when entering and exiting the shield (examples - ladder within the shield or a properly sloped ramp at the end).
- Employees are not allowed in the shield during installation, removal, or during any vertical movement.
- Shields can be 2 ft above the bottom of an excavation if they are designed to resist loads at the full depth and if there are no indications of caving under or behind the shield.
- The shield must extend at least 18 inches above the point where proper sloping begins (the height of the shield must be greater than the depth of the excavation).
- The end of the shield must be open protected from the exposed excavation wall. The wall must be sloped, shored, or shielded. Engineer designed end plates can be mounted on the ends of the shield to prevent cave-ins.

PERSONAL PROTECTIVE EQUIPMENT

It is DiFiore policy to wear a hard hat, safety glasses, and work boots on the jobsite. Because of the hazards involved with excavations, other personal protective equipment may be necessary, depending on the potential hazards present (examples -goggles, gloves, and respiratory equipment).

INSPECTIONS

Daily inspection of excavations, the adjacent areas and protective systems shall be made by the competent person for evidence of a situation that could result in a cave-in, indications of failure of protective systems, hazardous atmospheres or other hazardous conditions.

- All inspections shall be conducted by the competent person prior to the start of work and as needed throughout the shift.
- **Inspections will be made after every rainstorm or any other increasing hazard.**
- All documented inspections will be kept on file in the jobsite safety files and forwarded to the Safety Director weekly.
- A copy of the Daily Excavation Inspection form is located at the end of this program.

TRAINING

The competent person(s) must be trained in accordance with the OSHA Excavation Standard, and all other programs that may apply (examples Hazard Communication, Confined Space, and Respiratory Protection), and must demonstrate a thorough understanding and knowledge of the programs and the hazards associated. All other employees working in and around the excavation must be trained in the recognition of hazards associated with trenching and excavating.

19. ELEVATED WORK / FALL PROTECTION

PURPOSE

DiFiore Construction does not normally engage in elevated work or activities requiring fall protection. The information provided here is to be used by DiFiore employees that may encounter situations with which they are not familiar. In all situations, employees are not to engage in elevated/fall protection situations until they are thoroughly trained in the contents of this section, which specifies the safety requirements for working in positions elevated above fixed floors, mezzanines, and roofs.

RESPONSIBILITY

For work that must be done 6 feet or more above the lower level (LI), the Safety Director will appoint a competent person whose sole responsibility is to identify fall hazards and institute a Fall Protection Plan. The job supervisor is responsible for overseeing the proper use of all elevating equipment. Operators and employees should routinely inspect their equipment for any defects or damages and report flaws to their supervisor. Employees must use equipment only in accordance with manufacturer's specifications and recommendations and must wear appropriate personal protective equipment.

SCAFFOLDS

A. General

1. Scaffolds shall be of steel (except platform planks) and erected in accordance with the manufacturer's recommendations, applicable standards, and regulations.
2. The footing or anchorage for scaffolds shall be sound, rigid, and capable of carrying the maximum intended load without settling or displacement. Unstable objects such as blocks shall not be used to support scaffolds or planks.
3. Scaffolds and their components shall be capable of supporting, without failure, at least four times the maximum intended load.
4. Scaffolds shall be maintained in safe condition, and shall not be altered or moved horizontally while they are in use or occupied.
5. Any scaffold damaged or weakened from any cause shall be immediately repaired and shall not be used until repairs have been completed.
6. Scaffolds shall not be loaded in excess of the working load for which they are intended.
7. All planking shall be scaffold grade as recognized by grading rules for the species of wood used.
8. All planking on platforms shall be supported at each end and secured from movement.

9. Access ladders must be permanently installed as part of the scaffold.
10. The poles, legs, or uprights of scaffolds shall be plumb, and securely braced to prevent swaying and displacement.

B Use of scaffolds

1. A tag line should be used when hoisting materials onto a scaffold.
2. Work should not be done on scaffolds during storms, high winds, or on ice or snow.
3. Tools, materials, and debris must be removed frequently so that they won't become a hazard.
4. Treated or protected fiber rope shall be used for or near any work involving the use of corrosive substances or chemicals.

ELEVATING WORK PLATFORMS

Definitions

A. *Class A* -A manually or self-propelled work platform which is raised and lowered vertically by powered scissors or a telescoping hydraulic cylinder.

B. *Class B*- A vehicle mounted or self-propelled, articulating or extendible boom-with-a-bucket, or platform-at-the-upper-end type.

C. Operator -The trained person that operates the work platform.

D. Other Personnel -Other employees that may work on the platform.

Requirements

A. Operators must be trained and certified by a qualified instructor.

B. Personnel working on any platform must wear hard hats and eye protection.

C. Personnel working on Class B platforms must wear a safety harness attached to a lanyard which is attached to the work platform.

D. The certified capacity of a work platform must not be exceeded

E. During overhead work an area near the base of the work must be cordoned off with appropriate barricades marked with signs or lights. A watchman may instead be posted in lieu of barricades.

F. Personnel must always stand on the floor of the platform. Sitting, standing or climbing on the edge of the basket or use of planks and/or ladders in the basket or on the platform is forbidden.

G. When the job requires that an individual leave the platform or basket while it is elevated:

1. A supervisor must approve the need.
2. A safety belt with a lanyard must be worn. Hard hats and safety glasses must also be worn
3. The lanyard must be attached to a firm independent support, such as the building steel, not to the work platform.

H. Operators are to conduct daily inspections of the equipment in accordance with the manufacturer's instruction.

Maintenance

- A. Only qualified mechanics shall repair and maintain work platforms
- B. Manufacturer's specifications and recommendations will be followed No unauthorized modifications may be made to the equipment .

PORTABLE LADDERS

A .Approval

Only approved portable ladders that meet the applicable governmental and consensus standards may be used.

B. Inspection

An inspection shall be performed before each use to ensure that the ladder is in good condition. Each inspection must include checks for the following:

1. Missing, cracked, split, decayed or otherwise defective steps or rungs.
2. Cracks, splits, wane, decay or otherwise defective side rails.

3. Loose, broken or missing nails, screws, bolts, rivets or other metal parts.
 4. Grease, oil, or other slippery material.
 5. Inoperable or loose metal support bars and spreader bars on stepladders.
 6. Missing or damaged safety feet on straight and extension ladders.
 7. Defective ropes, pulleys, locks, and loose or missing guide rails on extension ladders.
 8. Adequate condition of bearings of locks, wheels, pulleys. etc.
- Remove ladders from service until they are cleaned if slippery material is found on them
 - Cut up ladders that fail inspection.
 - Temporary repairs are not permitted.

C. Ladder use

Use portable ladders in a safe manner. The following rules for safe use apply:

1. General

- a. Do not use a portable ladder as a platform, plank, or hoist.
- b. Do not use a portable ladder on a scaffold or on top of boxes, barrels, etc.
- c. Use only on a fixed floor or platform.
- d. Do not permit more than one person at a time on a portable ladder.
- e. Place the ladder on a firm level surface and do not use it on a slippery surface
- f. Do not place a ladder in front of doors that can open towards the ladder unless the door is blocked open, guarded, or locked.
- g. Keep your body centered between the rails of the ladder at all times. Any tools or materials needed should be safely stored in a belt while climbing, never in your hands.
- h. Hold on with both hands while climbing up or down. Place hands on the ladder rungs or side rails.

- i. Do not reach to the side of the ladder more than arm length when your body is centered between the rails. If you cannot reach something from that position, move the ladder so you can.
- j. Do not use metal ladders or ladders with metal parts while doing electrical work or where they may come into contact with electrical conductors.
- k. Always face the ladder while climbing up or down.
- l. Do not use a ladder in an environment where corrosives may attack any of its components.

2. Stepladders

- a. Before climbing the ladder, open it fully and lock the spreader bars.
- b. Place all feet firmly on a level supporting base.
- c. Never use a stepladder as a straight ladder.
- d. Do not stand or climb on the top platform or the top step (i.e., the top two levels)
- e. Do not store material on the top platform of the ladder.
- f. Do not climb the backside of a stepladder.

3. Extension and Straight ladders

- a. Never separate or use separate Sections of an extension ladder as a straight ladder.
- b. Always erect the ladder so that the top section (the fly) is above and resting on the bottom section (the base) with the rung locks engaged.
- c. Set at the proper angle (75) by placing the ladder base a distance from the vertical support equal to one quarter the total working length of the ladder.
- d. Erect with a minimum 3 feet (1 meter) extending above the roofline. If it is not possible to tie the ladder at its top support point, another person must hold the ladder at its base.
- e. Do not stand on any of the top three rungs.
- f. Do not overextend an extension ladder. The minimum acceptable overlap of sections is:
 - i. 3 feet (1 meter) for ladders up to 32 feet (9.75 meters) long

- ii. feet (1.3 meters) (or ladders up to 36 feet (11 meters) long
- iii. 5 feet (1.6 meters) for ladders up to 48 feet (14.6 meters) long

D. Storage

- 1. Store portable ladders in a clean, dry location free of excessive heat, chemicals or solvents where physical damage will not occur.
- 2. Do not store portable ladders where they may be contaminated, corroded or deteriorated by chemicals.

FALL PROTECTION

A. REQUIREMENT

- 1. Workers on walking/Working surfaces (WIWS) 6 ft. or more above lower levels (LI) shall be protected from falling in accordance with OSHA 1926 subpart M.
- 2. Fall protection systems must be provided and installed, when required, before employees begin work that necessitates the fall protection.
- 3. Employees who might be exposed to fall hazards must receive certified training
- 4. Facility owner requirements may be more stringent than OSHA; the more protective requirement will apply.

B. FALL PROTECTION SYSTEMS

The fall protection systems specified are acceptable methods for protecting employees from fall hazards. For complete information on the criteria and purchases for fall protection systems, see OSHA 1926 subpart M.

1. GUARDRAIL SYSTEMS

- a. **TOPRAIL** - The height of the toprail to the walking/working surface (W/WS) must be 42 inches (plus or minus) 3 inch tolerance (39 to 45) Toprail must be able to withstand a 200-lb. force without failure or deviating any tower than 39 inches.
- b. **INTERMEDIATE STRUCTURAL MEMBERS (ISM)** - A midrail must be half way between the walking/working surface (W/WS) and the toprail. Paneling, screening and vertical members, if used, must extend from the WIWS to the toprail. The maximum spacing for vertical

members is 19 inches on center, ISM must be able to withstand a 150-tb. force without failure.

c. **MATERIALS** A variety of materials may be used for guardrail construction as long as strength and height requirements are met. See OSHA subpart M Appendices B non-mandatory guidelines for acceptable guardrail construction. The following restrictions apply

- (i) The minimum diameter of the material must be 1/4 inch.
- (ii) No plastic or metal banding is allowed.
- (iii) If manila, plastic or synthetic rope is used, it must be inspected often to ensure it maintains its strength and height requirements.
- (iv) Wire rope must be flagged with high visibility material at 6 ft intervals,

d. **SPECIAL APPLICATIONS** - Removable guardrails may be used at hoist ways through the wall or floor to facilitate material handling. Offset guardrails must be installed at ladderway openings.

2. SAFETY NET SYSTEMS (SNS)

a. **INSTALLATION** - Safety nets must be installed no farther than 30 ft below the WIWS. The installation must prevent a person contacting a structure above or below the net during a fall. Safety nets must extend out from the edge of the WIWS and depending on how far below, the extension must be installed as follows:

- (i) Up to 5 ft extend the net 8 ft out
- (ii) More than 5 ft. up to 10 ft. extend the net 10 ft. out
- (iii) More than 10 ft. extend the net 13 ft. out

b. **DROP TEST** - Drop a 400-lb. sandbag into the net from the highest walking/working surface to determine if it is capable of absorbing an impact. If unreasonable to perform test, a competent person must certify proper installation,

c. **MATERIAL** - Mesh openings must be no larger than 6 ft. x 6 ft. and constructed to prevent enlargement. The border rope must have a 5000 lb. breaking strength and connections between panels must be spaced no farther than 6 ft. apart and maintain integral strength.

d. **INSPECTIONS** - Safety nets must be inspected at least once per week. Defective nets or components must be taken out of service. Materials, tools or other debris that have fallen into the net must be removed as soon as possible.

3. PERSONAL FALL ARREST SYSTEMS (PFAS)

- a. **ANCHORAGE POINTS** - Anchor points must be capable of supporting 5000 lb. per employee. Anchor points must be independent of any anchorage used to support suspended platforms.
- b. **BODY SUPPORT** - Body harnesses are the preferred equipment for the (PFAS). Body harnesses spread the impact forces to portions of the body better able to withstand it and allow an employee to be suspended upright while waiting for rescue. Body belts will no longer be acceptable after 1/1/98.
- c. **CONNECTORS** - Connectors must be dropped forged, formed metal or other equivalent metal, corrosion resistant, have smoothed edges and a 5000 lb. tensile strength proof tested to 3600 lb. Snap hooks must be of the locking type to prevent accidental disengagement after 1/1/98.
- d. **SYSTEM ACTIVATION**
 - (i) Arresting Forces - The arresting forces applied to the body during deceleration must be limited. The maximum arresting forces are as follows:
 - 1. 900 lb. for a body belt
 - 2. 1800 lb. for a body harness
 - (ii) Fall Distances- The (PFAS) must be rigged so that an employee cannot fall farther than 6 ft. or contact any lower level. The maximum deceleration distance to stop an employee is 3.5 ft.
- e. **LANYARDS & VERTICAL LIFELINES**- Lanyards and vertical lifelines must have a minimum breaking strength of 5000 lb.
- f. **HORIZONTAL LIFELINES**- Horizontal lifelines must be designed, installed and used under the supervision of a qualified person with a safety factor of two.
- g. **ENGINEERED SYSTEMS** - Engineered systems must be designed, installed and used under the supervision of a qualified person and be part of a complete (PFAS) with a safety factor of at least two.
- h. **INSPECTION** - (PFAS) must be inspected prior to each use for wear, damage and deterioration. Defective components must be removed from service. If a (PFAS) is impact loaded it must be immediately removed from service until repaired or deemed suitable by a competent person.

- i. **RESCUE** Employer must provide for prompt rescue in the event of a fall.

4. POSITIONING DEVICE SYSTEMS (PDS)

- a. **ANCHORAGE POINT** - Anchor points must be capable of supporting 3000 lb. per employee or two times the maximum impact load.
- b. **CONNECTORS** * Connectors must be dropped forged, formed metal or other equivalent metal, corrosion resistant, have smoothed edges, and a 5000 lb. tensile strength proof tested to 3600 lb. Snap hooks must be of the locking type after 111/98.
- c. **INSPECTION** - (PDS) must be inspected prior to each use for wear, damage and deterioration Defective components must be removed from service, If a (PFAS) is impact loaded ii must be immediately removed from service until repaired or deemed suitable by a competent person.

5. WARNING LINE SYSTEM (WLS)

- a. **INSTALLATION** * Erect around all sides of the roof 6 ft from the edge When mechanical equipment is used keep back 10 ft. from the edge in the direction of travel. Erect line 34 to 39 above the WIWS of the root.
- b. **MATERIALS** - Stantions must be weighted or secured to resist a 16-lb. tip over force, Line may be made of rope, wire or chain, must have a 500-lb. tensile strength and be flagged for visibility.
- c. **ACCESS PATH** - Points of access, storage and hoist areas must connect to the work area by a path formed by two warning lines.

6. CONTROLLED ACCESS ZONES (CAZ)

- a. **CONTROL LINE** - A control line restricts access to leading edges and other operations. When used install as follows and adjust as work progresses:
 - (i) Leading edges within 6 ft. to 25 ft.
 - (ii) Bricklaying within 10 ft. to 15 ft.
 - (iii) Precast erection 6 ft to 60 ft.
- b. **INSTALLATION** - Erect line 39 to 45' above the W/WS extended and enclose the entire length of the unprotected edge.

- c. **MATERIALS** - Stantions must be weighted to resist tip over. Line may be made of rope, wire or chain, must have a 200 lb. breaking strength and be flagged for visibility.

7. SAFETY MONITORING SYSTEM (SMS)

- a. **COMPETENT PERSON (CP)** - Employer must appoint a ‘competent person who is knowledgeable to recognize fall hazards and does not have other responsibilities that would take attention away from monitoring. CP must be on the same WANS and within sight and voice communication.
- b. **DANGER WARNING** - Warns employee of fall hazards and corrects unsafe actions. Employees must comply with fall hazard warnings.
- c. **RESTRICTION** - A SMS cannot be used where mechanical equipment is used or stored.

8. COVERS (C)

- a. **STRENGTH** - Covers must be capable of supporting two times the imposed load without failure. In vehicular traffic ways covers must be capable of supporting two times the maximum axle load.
- b. **INSTALLATION** - Covers must be secured against accidental displacement Covers must be labeled as “hole”, “Cover” or color-coded.

9. FALL PROTECTION PLAN (FPP)

- a. **COVERED OPERATION** - Option available only to leading edge operations, precast erection and residential construction where it can be demonstrated that it is not feasible or it creates a greater hazard to use conventional fall protection equipment.
- b. **PLAN DEVELOPMENT** - The plan must be developed by a qualified person, be site specific and updated for changes. A competent person will implement the plan on site. Plan must include discussion of measures that will be taken to reduce or eliminate hazards, the identity of the employees and the locations covered by the plan.
- c. **(FPP) LOCATIONS** - Work site locations identified on (FPP) will be classified as Controlled Access Zones. CAZ requirements apply.

10. PROTECTION FROM FALLING OBJECTS

- a. **PROTECTION** - The type of protection needed will depend on the height of the materials. Toeboards must be 3 1/2 high and capable of withstanding a 50-lb. force. Paneling and screening can extend up to the midrail or toprail. Canopies must be strong enough to prevent collapse and prevent penetration by falling objects.
- b. **SPECIAL OPERATIONS** - Bricklaying: keep materials and equipment except for masonry units and mortar 4 ft. from the edge. Roofing work: keep materials and equipment 6 ft. from the edge unless guardrails with toeboards, paneling or screening are erected.

C. DUTY TO HAVE FALL PROTECTION

1. **GENERAL** - Determine that the walking working surfaces (W/WS) that employees will work on have the strength and structural integrity to support them safely.
2. **FALL PROTECTION OPTIONS** - Fall protection is required when employees are exposed to falls from the WANS to any tower level (LL) of 6 ft. or Greater as indicated in the center column. The following table lists the fall protection systems OSHA allows based on the type of exposure. The column to the left lists types of operations or situations that present fall hazards. The column to the right lists the fall protection system options.
3. Abbreviations used below:
 - a. Guardrail Systems (GS)
 - b. Safety Net System (SNS)
 - c. Personal Fall Arresting Systems (PFAS)
 - d. Positioning Device Systems (PDS)
 - e. Warning Line Systems (WLS)
 - f. Controlled Access Zone (CAZ)
 - g. Safety Monitoring Systems (SMS)
 - h. Covers (C)
 - i. Fall Protection Plan (FPP)

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- j. Fence (F)
- k. Barricade (B)
- l. Equipment Guard (EG)

Operations/Hazard Situations	W/WS Toll	Fall Protection Options
Unprotected Sides and Edges	6ft	GS,SNS.PFAS
Leading Edges	6ft	GS,SNS.PFAS,FPP
Leading Edges*	6ft	
Hoist Areas	6ft	GS,PFAS
Holes (2" and larger)	6ft	C,GS,PFAS
Formwork and Reinforcing Steel	6ft	SNS.PFAS,PDS
Ramps, Runways, & Other Walkways	6ft	GS
Excavations (not readily seen)	6ft	GS,F,B
Excavations (small dia., well, pit, shaft, etc...)	6ft	GS,C,F,B
Dangerous Equipment	Less than 6ft	GS,EG
Dangerous Equipment	Greater than 6ft	GS,SNS,PFAS
Overhand Bricklaying	6ft	GS,SNS,PFAS,CAZ
Overhand Bricklaying (reach 10" below W/WS)	6ft	GS,SNS,PFAS
Low Sloped Roof	6ft	GS,SNS,PFAS OR WLS &GS, OR WLS & SNS OR WLS & PFAS OR WLS & SMS
Low Sloped Roof (50' wide or less)	6ft	SMS
Steep Roofs	6ft	GS with toe boards, SNS,PFAS
Precast Concrete Operations	6ft	GS,SNS,PFAS
Precast Concrete Operations*	6ft	FPP
Residential Construction	6ft	GS,SNS,PFAS

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Residential Construction*	6ft	FPP
Wall Openings (if bottom edge is 36" to W/WS)	6ft	GS,SNS,PFAS
W/WS's is not addressed above	6ft	GS,SNS,PFAS

- This option may be used if it can be demonstrated that it is not feasible or Creates a greater hazard to use conventional tall protection equipment

4. **PROTECTION FROM FALLING OBJECTS** - When exposure to falling objects exists employees will wear hard hat (**and**) erect guardrail systems with toe boards, paneling or screening (**or**) erect canopy and keep objects away from the edge (**or**) barricade area, prohibit employees and keep objects away horn the edge.

20. VEHICLE SAFETY

PURPOSE

To establish DiFiore Construction requirements for safe vehicle use.

RESPONSIBILITIES

1. The Safety Director will supervise compliance of vehicle safety.
2. All drivers must comply with these Company procedures in addition to those of New York State vehicle and traffic law.
3. Pedestrians are to use sidewalks and mar led crosswalks where available and observe alt traffic control devices.
4. The Safety Director will complete accident reports and corrective action reports for all accidents occurring on company property and/or involving an employee while he/she is working.

PROCEDURE

1. Each person must have a valid state driver's license to operate a company vehicle. All employees are required to report to the company if their license is suspended or revoked.
2. Seat bolts must be used at all times by all drivers and passengers. Passengers may not ride except in proper seals with seat belts.
3. All traffic regulations (including parking) must be observed at all times including customer rules and flagmen directions.
4. All loads must be property secured at all times and for all trips of any length. All doors must be closed and latched before a vehicle is moved.
5. Driving while using prescription drugs that may impair ability is not permitted.
6. Evidence of illegal drugs or alcohol may cause dismissal whether the employee is driving or not.
7. All vehicles must be inspected daily by the driver for:
 - a. Proper operation of the vehicle lights.
 - b. Proper operation of windshield wipers and washers,

- c. Condition of the tires,
 - d. Proper operation of the brakes and.
 - e. General appearance
8. No vehicle is to be operated in reverse until the driver has made certain that no people or obstructions are in the path of travel The driver must look in the direction of travel and sound the horn or other sound producing alarm while operating in reverse.
 9. DO NOT transport passengers in cargo section of vehicles unless the cargo space is empty. Such vehicles used to transport employees shall have seats firmly secured and adequate for the number of people to be carried.
 10. All accidents are to be reported in accordance with the company policy.

21. MOBIL POWER EQUIPMENT/LIFT TRUCKS

PURPOSE

DiFiore Construction does not normally engage in activities requiring the use of fork trucks. The information provided here is to be used by DiFiore employees that may encounter situation with which they are not familiar. In all situation employees are not to engage the use of fork truck equipment until they are thoroughly trained in the contents of this section that specifies the safety requirements for the safe use of lift trucks.

RESPONSIBILITIES

1. The Safety Director is to ensure that equipment is routinely inspected and provided in good working order, and that qualified operators are provided that are familiar with the equipment.
2. Operators will be trained in the proper use and inspection of their equipment. They will regularly inspect their equipment to ensure that it is in good, safe working order. They will follow all plant and company safety rules.
3. Safety department is to complete accident reports and corrective action reports for all accidents occurring on company property and/or involving an employee while he/she is working.

PROCEDURE

1. Examine forklift at day's start and report damage or faulty operation immediately.

2. No riders. Use secured safety platform when lifting personnel.
3. Avoid lifting or hitting anything if it appears that it could fall on the operator or a bystander. Remember that a truck equipped with an overhead guard and load backrest provides reasonable protection to the operator from falling objects but cannot protect against every possible impact. A truck without an overhead guard provides no such protection.
4. Keep yourself and all others clear of hoisting mechanisms.
5. Keep arms, legs, etc. inside the driver's compartment.
6. Allow no one under load or carriage.
7. Avoid bumps, holes, slick spots and loose materials that may cause truck to swerve or tip over
8. Travel slowly around corners.
9. Do not turn on an incline.
10. Do not fill fuel tank while engine is running.
11. Avoid sudden starts and stops.
12. Shut off engine, put truck in gear (or park for automatic transmissions), lower carriage completely and set parking brake when leaving truck Block wheels when on an incline or working on truck.
13. Observe the following load handling procedures:
 - a. Handle tools within rated capacity
 - b. Center weight of wide loads between forks.
 - c. Handle only stable loads.
 - d. Keep load against carriage
 - e. Watch swing when handling long loads.
 - f. Do not travel with load raised.
 - g. For better vision with bulky loads, travel in reverse, but always look out in the direction of travel and keep the load upgrade on/or 10% or more.
 - h. Lift and lower the mast vertical or slightly tilted back. Tilt elevated load forward only when directly over unloading place. If load or lifting mechanism is elevated to pick up or deposit a load, keep tilt in either direction to a minimum.

14. Watch clearances, especially forks, upright, overhead guard and fail swing.
15. Drive carefully, observe traffic rules and be in full control of the truck at all times. Be completely familiar with the operating procedures in the Owner's and Operator's Guide furnished with the truck and available from dealers.
16. Whenever a truck is equipped with vertical only, or vertical and horizontal controls elevatable with the lifting carriage or forks for lifting personnel, the following additional precautions shall be taken for the protection of personnel being elevated.
 - a. Use of a safety platform firmly secured to the lifting carriage and/or forks
 - b. When operating a lift truck that is being used to elevate personnel on a safety platform, the lift truck operator will remain at the controls until the person or persons on the platform have been lowered to the ground
 - c. Anytime a load is raised, and personnel are working on that load, someone shall be at the controls.
17. Stunt driving and horseplay shall not be permitted.
18. The driver shall be required to slow down for wet and slippery floors.
19. No truck shall be operated with a leak in the fuel and/or oil system until the leak has been corrected

22. CRANES

PURPOSE

DiFiore Construction does not normally engage in crane work. The information provided here is to be used by DiFiore employees that may encounter situation with which they are not familiar. Employees are not to engage in crane work until the Safety Director authorizes them. Following authorization the employee(s) must be thoroughly trained in the contents of this section, which specifies the safety requirements for safe use of cranes.

RESPONSIBILITIES

1. Management is to ensure that equipment is routinely inspected and provided in good working order and that qualified operators are provided that are familiar with the equipment.
2. Operators will be licensed in accordance with New York State Department of Labor. They will regularly inspect their equipment and ensure that it is in good working order. They will operate it in accordance with the manufacturer's recommendations and not over-load their equipment.
3. The crane user will advise the operator of any questionable underground conditions at the site and also provide the operator with accurate weight for the material to be hoisted. The user should be familiar with good rigging practice and use ANSI Standard hand signals to communicate with the crane operator unless radios are used.
4. The Safety Director is to complete accident reports and corrective action reports for all accidents occurring on company property and/or involving an employee while he/she is working.

PROCEDURE

1. All operators are to be licensed by New York State Department of Labor and be familiar with rigging standards.
2. All cranes are to be inspected monthly and a record kept in the crane.
3. All repairs are to be performed by qualified personnel Only.
4. Hand signals *are* posted on the job.
5. Load chart is in the crane.
6. Minimum of one (1) 5BC rated fire extinguisher.

7. Safe operation:

- a. Workers within the working radius of the crane shall wear hard hats.
- b. The driver of a truck being unloaded or loaded should leave the truck cab to avoid possible injury.
- c. Loads should be guided by the tag lines if necessary.
- d. Controls and main switches must be in the off position before operator leaves the crane.
- e. Only one person will signal the crane and the signals will be as per ANSI standards.
- f. Never allow anyone to stand under the load or boom unless adequate support is in place.
- g. Never allow anyone to ride the ball or the load.

8. Crane set up:

- a. Outriggers are to be fully extended with the wheels clear of the ground.
- b. Outrigger pads are to be securely attached to the *rams*.
- c. Crane is to be level on sound foundation or blocking.
- d. Barricade the area around the counterweight to prevent anyone from being caught between it and a stationary object.
- e. Notify Supervisor before operating near overhead power lines.
 - (1) Obey OSHA safe operating distance.
 - (2) Maintain 10 clearance between the load and any part of the crane.
 - (3) Always use ground rod and cable when working in and around power lines.

9. Inspection:

- a. Requirements
 - (1) Each crane shall be inspected by a competent person to assure its safe operating condition. Inspections shall be conducted in the following manner:

- (a) Periodic inspections shall be performed yearly. Documented results shall be recorded on the attached Record 01 Annual Inspection form and maintained on file.
 - (b) Frequent inspections shall be performed each month. Documented results shall be recorded on the attached Record of Monthly Inspection form and maintained on file.
 - (c) Cranes not in regular use (idle for a period of one month or more but less than six months) shall be re-inspected in accordance with the monthly procedure prior to use.
- (2) Hook inspections involving non-descriptive testing (ex liquid-dye-penetrant ILPI, and/or magnetic particle (Mt. etc.) shall be performed by a qualified person in accordance with governing codes and standards. The Owner shall maintain documented results on file.
 - (3) A competent person to determine whether they constitute a safety hazard should examine deficiencies noted during inspections.
 - (4) Cranes found deficient or otherwise unsafe shall be removed from service until repaired.
 - (5) Re-inspections shall be performed after any major repair.
- b. Record Keeping,
- (1) Periodic (annual) Inspection Reports are to be maintained for five years.
 - (2) Frequent (monthly) Inspection Reports are to be maintained for two years
- c. Attachments,
- (1) Record of Annual Inspection
 - (2) Record of Monthly Inspection

RECORD OF ANNUAL INSPECTION - CRANES
(Section I)

NAME OF OWNER: _____
 TYPE OF CRANE:
 Make _____ Model: _____ Serial No.: _____
 Rated Capacity (without Jib): _____ (with Jib): _____

 Length of Boom (extended): _____ (retracted): _____
 Length of Jib: _____ Counter Weight (lb.): _____
 Hour Meter Reading _____ Date: _____

(Section II)

VISUAL INSPECTIONS

SECTION II KEY:

- “G” New or in good serviceable condition
- “F” Serviceable but worn or obsolete
- “R” Recommended repair or replacement
- “N” Items not applicable

GENERAL

	Appearance
	Paint
	Cab
	Fire Extinguisher (5BC min)
	Glass (Safety Glass or equivalent)
	Load charts (existing and visible to operator)
	Mirrors

ENGINE

	Oil Level and Condition
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DIFIORE CONSTRUCTION SAFETY & HEALTH PLAN

	Hour meters (hours: _____)
	Operating condition
	Anti-freeze (temp. of protection _____)
	Engine Instruments
	All guards in position
	Grease/Oil Leaks

HYDRAULIC SYSTEM

	Hoses
	Lines
	Pumps
	Motors
	Fittings
	Hydraulic Fluid Level
	Leakage

CRANE STRUCTURE AND BOOM (Boom Assembly)

	Bolts and rivets
	Pines, bearings, shafts, gears (lubed/condition)
	Sheaves and drums (lubed/condition)
	Load and boom angle indicators (operation)
	Wire rope reeving
	Limit switches

DIFIORE CONSTRUCTION SAFETY & HEALTH PLAN

	Hood condition(see Specific Inspection)
	Hook Safety latch (operation)
	Load block condition (Load Capacity: _____)
	2 nd load block condition (Load Capacity: _____)
	Boom structure
	Telescope sections
	Jib condition (Capacity: _____)
	Boom hoist cylinders
	Swing motor, gear assembly and brake
	Control operation

ENGINE & HYDRAULIC SYSTEM(S)

	Oil level & condition
	Hydraulic fluid level & condition
	Operating condition
	Hoses/lines
	Pumps/motors
	Fittings
	Leakage
	Cooling system
	Anti-freeze (temp of protection _____ °F)
	Air system/pressure
	All instruments
	All guards in place

DIFIORE CONSTRUCTION SAFETY & HEALTH PLAN

	Exhaust system & mufflers(s)
--	------------------------------

CARRIER

	Tire Condition (inspect side walls for damage)
	Brakes
	Steering
	Out riggers
	Controls

ELECTRICAL

	Horn
	Back-up alarm (operation)
	Lights (lamps, taillights, turn signals, back-up) – Operation and Lenses
	Grounding cable and warning sign

(Section III)
SPECIFIC INSPECTION

HOOK

_____ Accept _____ Reject

Hook inspection criteria:

- Crane hooks with cracks as determined by an approved method of nondestructive testing (report to be attached), deformations greater than 15% (percent) in excess of normal throat opening more than a 10° (degree) twist from the plane of the unbent hook shall be cause of rejection.

WIRE ROPE

_____ Accept _____ Reject

Wire Rope Criteria:

1. In running ropes six (6) randomly distributed broken wires in one lay or three (3) broken wires in one strand in one lay.
2. Wear of one third of the original diameter of the outside wires.
3. Kinking, crushing, bird-caging or other structural damage.
4. Evidence of heal damage from any cause.
5. Reductions from nominal diameter of more than 1/64 inch for diameters up to and including 5/16 inch: 1/32 inch for diameters 3/8 inch to 1/2 inch inclusive; 3/64 inch for diameters 9)16 inch to 3/4 inch inclusive; 1/16 inch for diameters 7/8 inch to 1 1/8 inch inclusive and 3/32 inch for diameters 1 1/4 inch to 1 1/2 inch inclusive.
6. In standing ropes - more than two (2) broken wires in one lay in sections beyond and connectors or more than one broken wire at an end connection,

Inspected By _____ Date: _____

Title _____

Reviewed By _____ Date: _____

Title _____

State of New York
Department of Labor

Division of Industrial Safety Service
Bureau of Construction

Record of Owner’s Inspection of Mobile Crane, Tower Crane and Derrick

Industrial Code Rule 23-8.1 (b) INSPECTION(1) Every mobile crane, tower crane, derrick shall be thoroughly inspected by a competent, designated employee of authorized agent of the owner or lessee of such mobile crane, tower crane or derrick at interval not exceeding one month. Such inspections shall include but not be limited to all blocks, shackles, sheaves, wire rope, connectors, the various devices on the mast or boom, hooks, controls and braking mechanisms.

A written, dated and signed record of each such inspection shall be completed by the competent, designated employee or authorized agent who made the inspection on an inspection form provided by the commissioner. The most recent record of inspection of a mobile crane, tower crane, derrick, shall be posted inside the cab of such crane or derrick under a transparent protective covering or shall be filed in a office on the jobsite available for examination by the commissioner. Attached to such record of inspection shall be a written designation naming the competent employee or authorized agent. The owner or lessee of such mobile crane, tower crane or derrick shall sign such attached designation.

1. Owners Name	2. Crane No.	3. Type	4. Power										
5. Address		6. Manufactured By											
CARRIER ITEMS		INSPECTION NUMBER (check items inspected)											
7. MOBILE CRANE	1	2	3	4	5	6	7	8	9	10	11	12	
A. TIRES –WHEELS-LUGS													
B. AXLES													
C. CLUTCHES													
D. DRIVE SHAFT & JOINTS													
E. TRANSMISSION													
F. BRAKES													
G. OUTRIGGERS													
H. STEERING GEAR & CONTROLS													
8. CRAWLER CRANE													
A. CRAWLER PINS & PADS													
B. TRACK ROLLERS & IDLERS													
C. STEERING BRAKES													
D. TRACK TENSION													
E. TRACTION BRAKES													
F. DRIVE SPROCKETS CHAINS													
G. LOOSE OR MISSING BOLTS NUTS													
9. CRANE SUPER STRUCTURE ITEMS													
A. LOAD RADIUS CHARD POSTED													
B. CAPACITYCHART POSTED													
C. APPROVED BOOM ANGLE INDICATOR													
D. OVERALL CLEANLINESS													
E. ALL CONTROL MECHANISMS													
F. SWING													
G. HOIST													

DIFIORE CONSTRUCTION SAFETY & HEALTH PLAN

This form properly filled out must be kept on jobsite. Available for Examination by the Commissioner.

23. RESPIRATOR USE PROGRAM

PURPOSE

DiFiore construction does not normally engage in work activities requiring the use of respirators. This information is provided to assist management and employees in the event work conditions change, thereby necessitating the use of respirators. Employees are not to engage in work requiring respirators until they are thoroughly trained and authorized by the Safety Director.

- A. The guidelines in this program are designed to help reduce employee exposure against occupational dusts, fumes, mists, gases, vapors, etc.
- B. The primary objective is to prevent unnecessary exposure to these contaminants.
- C. Where feasible, exposure to contaminants will be eliminated by engineering controls, for example: general and local ventilation, enclosure or isolation, and substitution of a less hazardous procedure or material.
- D. When effective engineering controls are not feasible, the use of personal protective equipment may be required to achieve this goal.
After effective engineering controls have reduced exposures to the lowest possible level, and an environment is still not completely safe, it will be necessary to protect the worker from contact with airborne contaminants or oxygen deficient environments.

RESPONSIBILITIES

A. MANAGEMENT:

- 1. Standard procedures shall be developed for respirator use. These should include all information and guidance necessary for their proper selection, use, and care possible emergency and routine uses of respirators should be anticipated and planned for.
- 2. Develop a list, which identifies all operations, and tasks that require the use of a respirator and the appropriate respirator to be used.
- 3. Provide proper respiratory equipment and training to meet the needs of each specific application that comply with OSHA 1926.103 and 1910.134.
- 4. Provide medical Evaluation Questionnaire to comply with, Appendix C to Sec. 1910 134: OSHA Respirator Medical. This questionnaire is to be reviewed by a health care professional.

B. SUPERVISORY:

1. Superintendents, supervisors, or group leaders are responsible (or training personnel in the respiratory protection requirements for the areas in which they work.
2. They are also responsible (or compliance with all aspects of the respiratory program, including proper respirator selection, inspection, and maintenance.

RESPIRATOR SELECTION

- A. Respirators are selected and approved by management.

The Mine Safety and Health Administration and the National Institute shall approve respiratory protective devices for Occupational Safety and Health or acceptable to the U.S. Department of Labor for the specific contaminant to which the employee is exposed

The selection will be based upon the physical and chemical properties of the air contaminants and the concentration level likely to be encountered by the employee. The supervisor will make a respirator available immediately to each employee who, has the required training, and is placed as a new hire or as a transferee in a job that requires respiratory protection. Replacement respirators, cartridges and pre-filters will be made available as required.

EMERGENCY RESPIRATORY EQUIPMENT

- A. Self-Contained Breathing Apparatus may be required in specific areas when **it is** necessary to enter hazardous atmosphere areas. Only trained personnel for emergency use will use this equipment. The following points must be observed:

1. All potential users will be fully trained in the use of this equipment
2. The equipment is to be tested in an uncontaminated atmosphere prior to entering the hazardous atmosphere area.
3. An employee will not work with this apparatus in a hazardous atmosphere on an individual basis. At least one additional employee suitably equipped with a similar breathing apparatus must be in contact with the first employee and must be available to render assistance if necessary. Refer to the Policy and Procedure on confined space entry before work begins.

4. This equipment will be inspected monthly and after each use by trained personnel. Inspection and maintenance information will be recorded in a log.

SPECIAL CONSIDERATIONS REGARDING WEARING OF RESPIRATORS

- A. Persons should not be assigned to tasks requiring use of respirators unless it has been determined that they are physically able to perform the work and use the equipment. The local physician shall determine what health and physical conditions are pertinent. The respirator users medical status should be reviewed periodically (for instance, annually)
- B. Facial hair, including beards, sideburns, mustaches or even a low days growth of stubble are not permitted. Facial hair between the skin of the wearer and the seating surface of the respirator will prevent a good seal. The lack of a good seal will allow leakage of contaminants into the respirator.
- C. Ordinary eyeglasses shall not be used with full-face respirators. Eyeglasses with temple bars or straps that pass between the sealing surface of the respirator and the employee's face will prevent a good seal. This lack of a tight seal will allow contaminants to enter the respirator.
To ensure good vision, comfort, and proper sealing of the full face piece respirator, special corrective lenses can be permanently mounted inside. Eyeglasses and goggles may be worn with half face piece respirators, but must not interfere with the seal of the face piece.
- D. Workers shall not wear contact lenses when wearing a respirator.
- E. Facial deformities, such as scars, deep skin creases, prominent cheekbones, severe acne, and the lack of teeth or dentures, can prevent a respirator from sealing properly. Employees with such conditions may not be assigned tasks requiring the use of respirators.

EMPLOYEE TRAINING

- A. Each employee, upon assignment to an area requiring respirators, must be instructed in the respiratory program by a supervisor.
- B. All employees will be required to sign a respirator training document stating they have been trained in the use of respirators and their limitations. These forms will be retained by the home office for the duration of their employment plus One-year
- C. Minimum Training Requirements.
 1. Purpose of respirators.

2. Proper use of respirators.
3. Fitting instructions and sealing tests.
4. Limitations of respirators.
5. Proper cleaning procedures
6. Respirator inspection.
7. Respirator maintenance.
8. Respirator storage

RESPIRATORY HANDLING PROCEDURES (NON-DISPOSABLE TYPE)

A. Respirator Cleaning Procedure:

1. Respirators shall be regularly cleaned and disinfected. Respirators issued to employees shall be cleaned each day after use or more often if necessary.
2. Cleaning towelettes (non-alcoholic type) specifically designed for respiratory equipment should be used to clean and disinfect. If possible, detergents containing a bactericide should be used. Organic solvents should not be used, as they deteriorate the rubber face piece. If bactericide detergent is not available, the detergent wash should be followed with a disinfecting rinse. Two types of disinfectants may be made from readily available household products. Adding two tablespoons of bleach to one gallon of water (50PPM of chlorine) can make a hypochlorite solution. Adding one-teaspoon tincture of iodine to one gallon of water can make an aqueous solution of iodine (50PPM). A Two minute immersion of the respirator into either solution would be sufficient for disinfecting
3. When respirators cannot be thoroughly cleaned and disinfected by using cleaning towelettes and/or when water is not readily available, respiratory equipment should be washed with detergent in warm water using a brush
4. Respirator equipment shall be thoroughly rinsed in clean, warm water (120 degrees Fahrenheit maximum) to remove all traces of detergent cleaner, sanitizer, and disinfectant.
5. Respiratory equipment shall be allowed to air dry on a clean surface.

B. Respirator Inspection:

1. All respirators shall be inspected before and after each use.

B. Minimum Inspection Points for Cartridge Respirators:

1. Tightness of connections.
2. Condition of face piece
 - Excessive dirt.
 - Cracks, tears, holes.
 - Distortion.
 - Scratched, cracked, or loose fitting lenses.
3. Headbands:
 - Breaks or tears.
 - Loss of elasticity.
 - Broken or missing buckles or attachments.
4. Inhalation and Exhalation Valves:
 - Detergent residues.
 - Dust Particles.
 - Cracks, tears, or distortion of valve material.
 - Missing or defective valve covers.
5. Filter/Canisters
 - Proper type for hazard present.
 - Missing or worn gaskets.
 - Worn or stripped threads.
 - Cracks or dents.
 - Missing or loose clamps.

C. Minimum Inspection Points for Air Supplied Respirators:

1. General condition of air hoses:
 - i. Breaks, tears and kinks.
 - ii. End fittings for nicks, dents, gouges and tightness
2. Proper setting of regulators and valves (consult manufacturers' recommendations)
3. Correct operation of air purifying elements.
4. All defects shall be repaired immediately. If an item is defective and cannot be repaired it will be removed immediately from service.
5. Defective respiratory equipment will be tagged as defective the tag will include: date, defect, and the name of the employee to whom it *was* issued.

6. The work site supervisor will remove all defective respiratory equipment from the work site as soon as practical, but at least by the end of the shift. Defective items, which cannot be repaired, will be destroyed.

D. Respirator Maintenance:

1. A program for maintenance and care of respirators shall be adjusted to the type of plant, working conditions and hazards involved, and shall include the following basic services.
2. When repairs are made on respirators, the repair parts used must be for that specific model of respirator. The interchanging between different models will void the respirator's certification and may cause dangerous air leaks or equipment failure
3. Rubber elastomer parts shall be inspected for pliability and signs of deterioration. Stretching and manipulating rubber or elastomer parts with a massaging action will keep item pliable and flexible and prevent them from taking a set during storage
4. A selection of respirator repair parts shall be maintained at the work site for each model of respirator in use or a replacement respirator provided. The replacement parts and/or additional respirators will be kept in a clean room or area.

E. Storage Procedure

1. When not in use, respiratory equipment shall be sealed in a plastic bag and placed in a storage container specifically designed for that purpose.
2. Respirators should be stored in such a way as to not apply pressure to the face piece.
3. Storage containers must protect respirators from dust, sunlight, heat, extreme cold, excess moisture, and contamination.

F. PROGRAM EVALUATION

1. The safety engineer/manager is responsible for regular inspection and evaluation of the program effectiveness.
2. Each supervisor must conduct documented inspections.
3. A record shall be kept of inspection dates and findings for respirators maintained for emergency use.

DIFIORE CONSTRUCTION SAFETY & HEALTH PLAN

24. HEARING CONSERVATION

PURPOSE

To define the procedures and methods to be used to protect personnel exposed to noise levels at a Time Weighted Average (TWA) of 85 decibels or more.

- A. The guidelines in this program are designed to help reduce employee exposure to high noise.
- B. The primary objective is to prevent unnecessary exposure to high noise.
- C. Where feasible, exposure to high noise will be eliminated by engineering controls, for example: enclosure, isolation, substitution or shielding
- D. When effective engineering controls are not feasible, the use of personal protective equipment may be required.
- E. If after effective engineering controls have reduced exposures to the lowest possible level and noise levels are still high, personal protective equipment may be required.

REFERENCE DOCUMENTS

OSHA 29 CFR 1910.95, Occupational Noise Exposure.
OSHA 29 CFR 1926.52, Occupational Noise Exposure.
OSHA 29 CFR 1926 101, Hearing Protection

RESPONSIBILITIES

A. MANAGEMENT

1. Determine which operations and tasks produce high noises through measurements and/or contacts with suppliers, associations, consultants, etc.
2. Develop a list that identifies all operations and tasks that produce high noise and the protective measures required.
3. Provide proper hearing protection equipment to meet the needs of each specific application

4. Provide training programs and instructions for all protective measures identified in the list.

B. SUPERVISORY

1. Superintendents, supervisors, or group leaders are responsible for training personnel in the hearing protection and noise level protective measures requirements for the areas in which they work.
2. They are also responsible for compliance with all aspects of the hearing conservation program, including proper personal protective equipment selection, inspection, and maintenance.

HEARING PROTECTION SELECTION

The hearing protectors used shall be those specified in the list of high noise jobs unless a qualified industrial hygienist specifically establishes another acceptable article.

GENERAL

The Hearing Conservation Amendment requires a continuing, effective hearing conservation program whenever employee noise exposures equal or exceed an 8-hour time-weighted average sound level (TWA) of 85 decibels measured on the A scale (slow response). Employees shall not be allowed exposure to sound pressure levels exceeding 140 decibels peak.

The objective of the noise monitoring program is to obtain current information about the noise environment in workplaces with sufficient detail and accuracy so that management can make decisions regarding engineering controls and a hearing conservation program that will protect employees and comply with federal regulations.

CONTROL METHODS

When employees are subjected to sound exceeding the permissible amounts, feasible administrative or engineering controls shall be utilized. If such controls fail to reduce Sound levels to permissible amounts, personal protective equipment shall be provided and used to reduce noise exposure to acceptable levels.

PROCEDURE

The following procedures shall be followed in order to have a uniform method of complying with regulatory requirements:

Monitoring

When Information Indicates that an employee's exposure may equal or exceed a 6- hour time-weighted average of 85 decibels, implement the monitoring program outlined below.

- A. All continuous intermittent and impulsive sound levels from 80 to 130 decibels shall be integrated into the noise measurements.
2. Repeat the monitoring whenever a change in production, process, equipment or controls increases noise exposures to the extent that:
 - a. Additional employees may be exposed at or above the action levels
 - b. The attenuation being provided by hearing protectors is rendered inadequate.
3. Notify each employee exposed at or above the 8-hour TWA of 85 decibels of the results from the monitoring.
4. Provide affected employees the opportunity to observe any noise measurements conducted pursuant to this procedure.

Audiometric Testing

1. Audiometric testing will be given to all employees whose exposure equal or exceed an 8-hour TWA of 85 decibels
2. The program is provided at no cost to employees.
3. Audiometric tests must be performed by.
 - i. Licensed or certified audiologist, otolaryngologist or other physician.
 - ii. Technician certified by the Council of Accreditation in Occupational Hearing Conservation, Technicians who perform audiometric tests must be responsible to an audiologist, otolaryngologist or other physician.
 - iii. All tests must meet the requirements of Appendix C or OSHA 1910.95.
4. Within 6 months of an employee's first exposure at or above the action level, the employer shall establish a valid baseline audiogram against which subsequent audiograms can be compared.

5. If a mobile audiometric test van is used, the period is one year for establishing the baseline.
6. Baseline testing must be preceded by at least 14 hours without exposure to workplace noise. Hearing protectors may be used as a substitute for this requirement. Notify the employee of the need to avoid high levels of noise during this 14 hour period.
7. After obtaining the baseline audiogram, Obtain a new audiogram for each employee exposed at or above the action level at least annually.
8. Compare the annual audiogram to that of the baseline to determine if the audiogram is valid and if a standard threshold shift has occurred. A technician can do this.
9. If the annual audiogram shows that the employee has suffered a standard threshold shift, you may obtain a retest within 30 days and use that as the annual audiogram.
10. An audiologist, otolaryngologist or physician must review problem audiograms and determine if there is a need for further evaluation.
11. Provide the person performing the evaluation the following:
 - i. A copy of this procedure.
 - ii. A baseline and the most recent audiogram of the employee to be evaluated.
 - iii. Measurements of background sound pressure levels in the audiometric test room.
 - iv. Records of audiometer calibrations.
12. If a comparison of the annual to the baseline audiogram indicates a standard threshold shift has occurred, the employee must be informed of this fact in writing within 21 days of determination.
13. Unless a physician determines that the standard threshold shift is not work related or aggravated by occupational noise exposure, the employer shall ensure that the following steps are taken when a standard threshold shift occurs:
 - i. Employees not using hearing protectors shall be fitted with protectors, trained in their use and care, and required to use them.

- ii. Employees already using hearing protectors shall be refitted and retrained in their use and provided new ones offering greater attenuation, if necessary.
 - iii. Refer the employee for a clinical audio logical evaluation or an ontological examination, as appropriate, if additional testing is necessary, or if wearing hearing protectors causes a suspected medical pathology of the ear.
 - iv. Inform the employee of the need for an ontological examination if a medical pathology of the ear is unrelated to the wearing of hearing protectors.
14. If subsequent audiometric testing of an employee whose exposure to noise is less than an 8-hour TWA of 90 decibels indicates that a standard threshold shift is not persistent, take the following actions:
- i. Inform the employee of the new audiometric interpretation.
 - ii. You may discontinue use of hearing protectors for that employee.
15. An annual audiogram may be substituted for the baseline when in the judgment of the audiologist, otolaryngologist or physician evaluating the audiogram.
- i. The standard threshold shift revealed by the audiogram is persistent.
 - ii. The annual audiogram indicates significant improvement over the baseline audiogram.
16. Standard threshold shift is a change in hearing threshold relative to the baseline audiogram of an average of 10dB or more than 2000, 3000 and 4000 Hz in either ear.

Hearing Protection

1. Employees exposed to an 8-hour time-weighted average of 85 decibels or greater shall be furnished hearing protectors Replace them as necessary.
2. Employers will ensure that any employee exposed to an 8-hour TWA of 85 dB or greater wears protectors.
3. Employers shall provide a variety of suitable hearing protectors from which the employees may choose.

4. Employers shall provide training in the use and care of protectors provided to the employees. Employers shall also ensure proper initial fitting.
5. Employers shall evaluate hearing protector attenuation for the specific noise environments in which the protector will be used. Methods described in OSHA 1910.95, Appendix B, will be used. Protectors must attenuate employee exposure at most to an 8-hour time-weighted average of 90 decibels. For employees who have experienced a standard threshold shift, protectors must attenuate exposure to an 8-hour TWA of 85 decibels or below.

Training

1. Employees exposed to noise at or above an 8-hour TWA of 85 decibels shall participate in a fitting training program instituted by the employer
2. The training program shall be repeated annually for each employee included in the hearing program. Information included in the program shall be updated to be consistent with changes in protective equipment and work processes.
3. Insure that each employee is informed about:
 - a. The effects of noise on hearing.
 - b. The purpose of hearing protectors.
 - c. The advantages, disadvantages and attenuations of various types, and instructions on selection, fitting, use and care of protectors
 - d. The purpose of audiometric testing and an explanation of the test procedures.

Access to Information

Employers shall make available, to affected employees, copies of all records required by OSHA 1910.95. In addition, a copy of 1910.95 and this procedure shall be posted in the workplace.

Record Keeping

1. The employer shall maintain the following records:
 - a. Employee exposure measurements.
 - b. Audiometric test records. This record shall include:
 - i. The name and job classification of the employee

- ii. The date of the audiogram
 - iii. The examiner's name
 - iv. The date of the last calibration of the audiometer.
- c. Employee's most recent noise assessment.
 - d. Accurate records of the measurements of the background sound pressure levels in the audiometric test rooms.
- 2. Noise exposure measurement records shall be retained for two years.
 - 3. Audiometric test records shall be retained for the duration of the affected employees employment.

Permissible Noise or Sound Level		
Duration per day	Hours	Response
	8	90
	6	92
	4	95
	3	97
	2	100
	1-1/2	102
	1	105
	1/2	110
	1/4orless	115

HEARING PROTECTION ON CONSTRUCTION SITES

When sound levels exceed the permissible values shown above, action must be taken through engineering or administrative controls to prevent employee exposure. Due to the short time frames of work in a specific area, engineering controls may not be feasible, in which case the use of suitable personal protective equipment must be utilized to protect employees. Ear plugs or muffs, which provide the required noise attenuation, must be provided to the affected employees.

25. PERSONAL PROTECTIVE EQUIPMENT PURPOSE

DiFiore Construction has a program to promote the proper use of personal protective equipment and clothing, other than respiratory and hearing protection, to prevent occupational injury and illness when hazard elimination or engineering controls are not feasible.

RESPONSIBILITIES

Supervisors must obtain and distribute personal protective equipment as required, and must report to the Safety Director any employee who refuses to comply.

REQUIREMENTS

DiFiore supervisors will perform a hazard assessment in the workplace to identify exposures that are, or are likely to be present that require the use of PPE, and certify, in writing that the assessment has taken place. As a sub-contractor DiFiore will comply with hazard assessments performed by the general contractor.

Select, and assure affected employees use, PPE that will protect against identified hazards.

Affected employees must receive training to use the selected PPE.

Training must include:

1. when PPE is necessary
2. what PPE is necessary
3. how to properly don, doff, adjust and wear PPE
4. limitations of PPE
5. proper care, maintenance, typical useful life and disposal of PPE

Training must be certified in writing.

Provisions for retraining when:

1. changes in the workplace render previous training obsolete
2. changes in PPE

3. employee demonstrates a lack of understanding in use of PPE

Head Protection

Employees must wear protective helmets when working in areas where there is a potential for injury to the head by falling objects or when working in an area where the head could come into contact with exposed electrical conductors.

Eye Protection

A minimum of safety glasses meeting the ANSI Z87 specifications shall be worn at all times. Additionally, appropriate eye or face protection shall be used when exposed to flying particles, molten metal, liquid chemicals, acids or caustic liquids, chemical gases or vapors, or potentially Injurious tight radiation.

Foot Protection

Protective footwear shall be worn when working in areas where there is a danger of foot injuries due to falling or rolling objects, objects piercing the sole, and where there exists a potential exposure to electrical hazards.

Hand Protection

Gloves can provide protection from cuts, bruises, concrete burns, caustic substances, slivers, etc. They should be specifically selected for the particular hazard(s) and worn when the hazard(s) exist.

Other personal protective equipment may be required for specific jobs such as: rain suits, boots etc Safety belts and/or harnesses are required for work in areas above 6 feet off the ground (see section 19. Elevated Work & Fall Protection).

This equipment may be required at the discretion of the job supervisor.

Violators are subject to disciplinary action, suspension or dismissal.

26. HAZARD COMMUNICATION PROGRAM

PURPOSE

DiFiore Construction expects and requires that all supervisors and employees comply with regulations requiring that employees be made aware of the potential hazards associated with materials in the workplace.

REFERENCE DOCUMENTS

OSHA 29CFR 1910.1200, Hazard Communication, General Industry
OSHA 29CFR 1926.59, Hazard Communication, Construction
OSHA 29CFR 1910.Subpart Z, Toxic and Hazardous Substances
NIOSH/OSHA DHEW Publication No, 78-2 10, Pocket Guide to Chemical Hazards

DEFINITIONS

Hazardous Chemical - any chemical that is a physical hazard or a health hazard

Health Hazard - a chemical for which there is statistically significant evidence that acute or chronic effects may occur in exposed employees.

Physical Hazard - a chemical for which there is scientifically valid evidence that it is a combustible liquid, a compressed gas, explosive or flammable material.

GENERAL

This program has been developed to provide employees with information concerning hazardous materials to which they may be exposed at their work location, It includes the protective measures to be taken, the safe work habits necessary to eliminate or minimize the risks of unhealthful exposure, and to provide the information required to facilitate medical treatment in the event of unsafe levels of exposure.

The primary elements of the program are:

1. Identifying and maintaining a listing of all hazardous substances in use in the plant or Job Site, as applicable.
2. Obtaining from suppliers and subcontractors (or other parties, when applicable). a Material Safety Data Sheet (MSDS) for each hazardous substance in use, and making the MSDS readily accessible to all employees (as well as client or subcontractor representatives if applicable).

3. Ensuring that all containers of hazardous substances are properly labeled.
4. Communicating to employees the contents of this program as well as MSDS information for the specific hazardous substances to which they may be exposed.

RESPONSIBILITIES

1. Identification of hazardous substances
 - a. DiFiore Construction will provide the owner and general contractor a listing of any hazardous materials under their contract.
 - b. The job site Plant Manager/Project Manager shall be responsible for identifying the hazardous substances in use in the plant or job site and shall prepare a perpetually maintained listing of the substances.
 - c. At the request of the Project Manager, subcontractors shall be required to provide a listing of all hazardous materials under the subcontractor's control.
 - d. The hazardous materials list shall be kept current by the following actions:
 - i. Purchasing shall request an MSDS for every chemical that is requisitioned.
 - ii. When it is determined that a new hazardous material is to be used in the plant or at the job site, the new substance will be added to the list.
 - iii. The Project Manager shall require that subcontractor's management supply information when a new hazardous substance is brought on the job
 - iv. The Project Manager shall remove items from the active listing, to an archive list, as those hazardous substances are permanently depleted or removed from the job site. Examples: If a particular subcontractor is the only one using a substance that is on the listing and that subcontractor's work has been completed and the substance removed, it will be deleted from the listing Likewise, if a chemical is used in the plant or a job site for a particular phase of the work (e.g. cleaning Solvent for high voltage terminations) and the substance is no longer needed, it shall be disposed of and the item removed from the active listing.
 - e. When acting as a subcontractor or working on a job site under the control of a General Contractor or Construction Manager, the Project Manager shall request MSDS from the General Contractor or Construction Manager

or arrange for employees to have access to other contractors MSDS tiles, as applicable, and to take part in the hazard training provided by the individual contractors.

2. Material Safety Data Sheets

- a. Chemical manufacturers are required to provide MSDS to users of the chemicals
- b. For each hazardous substance shown on the listing prepared as described above, the Purchasing Agent, Plant Manager/Project Manager, as applicable, shall coordinate the acquisition of an MSDS to be used for information and training of personnel and for reference information for subcontractors when applicable.
 - i. MSDS for hazardous substances purchased by personnel will be requested from the vendor or other source from which it is purchased
 - ii. MSDS for hazardous substances brought to the job site by subcontractors will be requested from the subcontractor.
 - iii. In certain situations, where there is no fixed job site, such as in servicing operations, MSDS may be retained in a central location, providing that the information is readily available by telephone, computer terminal, etc.. in the event of an emergency.

3. Labeling containers of hazardous substances

The Plant Manager/Project Manager, as applicable, shall ensure that containers of hazardous substances in the plant or job site are labeled with the identity of the substance and with appropriate words, pictures or symbols to convey a warning of the health and physical hazards of the substance.

- a. Labels must conform to the following criteria:
 - i. The identity appearing on the label must match the identity shown on the corresponding MSDS. (Refer to MSDS Section 1, upper left)
 - ii. The identity on the label must also match the identity shown on the hazardous substance listing
- b. The subcontractor, who introduces a hazardous substance to a job site, or a supplier of a purchased substance, should provide the labels.

4. Employee information and training

- a. The contents of this program shall be conveyed to affected employees. Employees shall be made aware of any operations in their work area where hazardous chemicals are present, the location of the hazardous chemicals listing, and the procedure for obtaining MSDS information
 - b. Employee training may be in a classroom or group meeting. However, based on work schedules, job peculiarities, etc., the training requirements can be met if each employee reads the contents of this program and is given an opportunity to present questions and receive answers concerning the program. New employees should receive orientation and training on the program as soon as they report to work.
5. Employee training shall include:
- a. Methods and observations which may be used to detect the presence or release of hazardous chemicals.
 - b. The physical and health hazards of chemicals in the work area.
 - c. The measures employees can take to protect themselves from these hazards including any plant or job Site procedures or work practices.
 - d. Details of the hazard communication program, including an explanation of labeling, how to read an MSDS, and how the employee can obtain and use hazard information.

The Project Manager, as applicable, shall assign personnel to conduct employee training. Personnel performing training functions shall maintain accurate records of all personnel trained including dates of training, subjects covered and personnel attending.

27. LEAD MANAGEMENT PROGRAM

PURPOSE

DiFiore Construction does not normally engage in activities involving lead exposure. The information provided here is to be used by DiFiore employees that may encounter situation with which they are not familiar. In all situations employees are not to engage in activities exposing them to lead until they are thoroughly trained in the contents of this section that specifies the safety requirements to protect them from harmful exposure to lead.

RESPONSIBILITIES

Is it the employers responsibility to perform load exposure assessments and comply with the standards and actions outlined by OSHA. Employees should practice good hygiene habits to avoid breathing or ingesting lead. They should be aware of the lead poisoning symptoms in order to seek medical attention immediately if the symptoms appear Any employee must contact the Safety Director if he or she suspects exposure to lead.

Lead has been poisoning workers for thousands of years. In the construction industry, traditionally, most overexposures to lead are found in the trades such as plumbing, welding and painting.

In building construction, lead is frequently used for roofing, tank lining, electrical conduits, plumbing and painting.

Significant lead exposures can arise from removing paint from surfaces previously coated with lead-containing paint, such as in bridge repair, residential renovation and demolition.

Operations that generate lead dust and fumes include the following:

1. flame-torch cutting, welding and grinding of lead painted surfaces in repair, reconstruction, dismantling and demolition work
2. abrasive blasting of bridges and other steel structures containing lead-based paints
3. using torches, head guns and sanding machines during abatement of lead based paint.

Operations that involve exposure to lead containing products include:

1. spray painting bridges and other structures with lead-based paints and primers

2. using solder in plumbing and electrical work.

Lead can be absorbed into the body by inhalation (breathing) and ingestion (eating). Very small amounts of lead that may be unintentionally ingested via eating, drinking or smoking on the job can be harmful. Good personal hygiene is important on jobs where lead is present.

Lead exposure is very harmful. It can affect the brain, leading to seizures, coma and death. Lead poisoning can occur at high exposure concentrations (acute) or at low exposure concentrations over a long period of time (chronic) and can cause either temporary or permanent damage.

Lead is a cumulative poison. It accumulates in the blood, bones and organs, including the kidneys, brain and liver. It stays in the bones for decades. It may be slowly released over time to cause toxic effects. Increased blood level usually means there has been some recent exposure. Early effects of lead poisoning are not specific and resemble flu-like illnesses. Worker awareness and training are important so that employees can recognize the symptoms of exposure and get medical attention.

The OSHA standard establishes maximum limits of exposure to lead for all workers covered, including a permissible exposure limit and action level.

Permissible Exposure Limit (PEL):

The PEL sets a maximum worker exposure to lead. No employee may be exposed to lead in airborne concentrations greater than 50 ug/m³ averaged over an eight-hour period.

Action level:

An action level is the level at which an employer must begin certain compliance activities outlined in the standard. The action level, regardless of respirator use, for the lead in construction standard is an air born concentration of 30 ug/m³ calculated as an eight-hour TWA.

Where initial employee exposure is at or above the action level, we must collect personal samples representative of a full work shift. Until we perform an exposure assessment, we must treat employees performing certain operations as if they were exposed above the PEL. Contact the Safety Director immediately if you suspect an exposure to lead.

It is this company's policy that worker safety is **NUMBER ONE**. We, as a rule, never do any lead abatement each project will have special circumstances.

Usually any potential lead has been removed prior to the start of our project. This would be done by a previous contractor or sub-contractor. If we do encounter a lead hazard, contact the Safety Director for the proper abatement methods. Usually another contractor

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will be hired to abate all lead prior to our exposure. We will work together with the owner representative to provide a safe workplace.

28. FIRE PREVENTION & CONTROL

PURPOSE

To protect workers, property and the community from fire.

RESPONSIBILITY

The project manager must be sure that his housekeeping and total waste control system is adhered to and that all flammable/combustible materials are removed from the job site and properly disposed of. It is also the project manager's job to ensure exits are marked, a telephone is available and a working fire extinguisher is at the job site in the event a fire does occur. It is the responsibility of the employees to make themselves aware of the flammable/combustible materials in their area and to work carefully to avoid accidental ignition.

Although fires are infrequent at construction job sites, when they do occur, the resulting damage can be catastrophic. Fire can spread rapidly as it consumes combustible materials such as polyethylene, flammable liquids, rags, paper, wood etc. Fires can create immediate life threatening conditions in a very short time. Common chemicals used at job sites that are subject to excessive heat can generate by-products such as phosgene gas, carbon monoxide, carbon dioxide and chlorine gas.

These guidelines must be followed to protect workers at a jobsite.

1. Keep trash and debris to a minimum good housekeeping is the most effective way to prevent fire.
2. Reduce the amount of flammable/combustible materials at the jobsite. Remove any chemicals, flammable liquids, or heat sensitive materials.
3. When using a cutting torch:
 - a. Know and follow work site open flame permit system
 - b. Know what is on the other side of the wall or below the floor.
 - c. Use sheet metal or a treated tarp to catch sparks.
 - d. Post a fire watch with an appropriate fire extinguisher.
4. Mark exits from work area and post directional arrows

D I F I O R E C O N S T R U C T I O N S A F E T Y & H E A L T H P L A N

- a. It is recommended that these directional arrows be placed close to the ground to assist workers who may be crawling in smoky conditions to escape a fire.
 - b. If the work area is large and many workers are present, several emergency exits may be needed
 - c. A daily inspection should be conducted to insure secondary exits are not blocked
 - d. Provide lighting on exits and exit route
5. Post local fire department and rescue squad phone numbers, advise them of the operations in progress
 6. A telephone should be available at all times for notifications of authorities in case of emergency
 7. 7 Strictly enforce no smoking policies

29. HOT WORK

PURPOSE

To establish the requirements for safe welding, cutting, soldering, heating, etc.

RESPONSIBILITIES

The Safety Director is responsible for all aspects of the hot work program.

PROCEDURE

1. General
 - a. All combustible materials must be removed or protected by a welding blanket from the place where the flame or arc is to be:
 - i. 5 feet horizontally
 - ii. 45 feet below
 - iii. 10 feet above
 - b. No arc or flame operation is permitted in an area where painting is being done or where combustible dusts or flammable liquids are present.
 - c. A fire watch with proper extinguishers must be posted during all flame or electric arc work and for 30 minutes after such work. A fire watch must also be posted for 25 minutes after use of temporary heaters.
 - d. Mechanical ventilation and/or respirators must be provided when welding, cutting or heating:
 - i. Hazardous materials such as stainless steel, cyanides, zinc, cadmium, heavy metals, etc.
 - ii. In confined spaces.
2. Oxy-acetylene torches
 - a. Fuel gas and oxygen hoses must be easily distinguishable and connections cannot be interchangeable.
 - b. All connections must be clean and free of grease or oil
 - c. Back flow preventers must be installed at the mixing tube of all torches d
Hoses shall not be laid across traffic areas.

- d. All gas cylinders must be secured in an upright position. When in storage the protective cap must be on the cylinder.
3. Propane torches
 - a. Hoses shall not be laid across traffic areas.
 - b. All gas cylinders must be secured in an upright position. When in Storage the protective cap must be on the cylinders and the cylinders protected against mechanical damage.
4. Electric arc welders
 - a. All arc welding must be protected by non-combustible shields or curtains to prevent people from viewing the arc.
 - b. When electrode holders are left unattended, the electrodes must be removed and the holders placed or protected so that they cannot make contact with each other, conductive objects or people.
 - c. All welding cable must be insulated completely. Any splices or repairs must have insulation with a resistance equal to or greater than the original insulation
5. Propane fired heaters
 - a. The propane fuel tank must be located 20 feet from the burner.
 - b. Hoses shall not be laid across traffic areas.
 - c. All gas cylinders must be secured in an upright position. When in storage the protective cap must be on the cylinders and the cylinders protected against mechanical damage.
6. Liquid fueled heaters
 - a. All liquid fuels must have a flashpoint of 100° F or more
 - b. Refueling shall only be done after the heater has been off for 15 minutes or more
 - c. Fuel storage must be located well away from any heat source and protected from mechanical damage.

30. HOUSEKEEPING

PURPOSE

To establish a housekeeping program which provides a clean, orderly work site. A basic concept in any endeavor is the need for good housekeeping.

RESPONSIBILITIES

The Safety Director is responsible for the creation, implementation and control of a total waste control and housekeeping system. Good housekeeping is planned, implemented, and monitored.

PROCEDURE

1. Determine the types and the estimated amount of waste which will be produced considering the types of work which will be done
2. Determine the potential for recycling of the various types of waste which will be produced.
3. Designate waste deposit locations and containers for:
 - a. Corrugated cardboard and paper
 - b. Metals
 - c. Glass
 - d. Plastics
 - e. liquids
 - f. Other specific materials if the quantity justifies it
 - g. Hazardous liquids
 - h. Hazardous solids
 - i. Non-hazardous, non-recyclable, liquid materials
 - j. Non-hazardous, non-recyclable, solid materials
4. Label all containers to indicate their purpose.

5. Designate responsibilities for collection of all materials and for placing them in the waste containers
6. Arrange for the regular removal of the contents of the waste containers
7. Distribute specific directions specifying the proper and acceptable placement of everything that as necessary *for* the project.
 - a. Tools and toolboxes
 - b. Construction materials
 - c. Equipment
 - d. Air lines
 - e. Oxy-acetylene hoses
 - f. Welding leads
 - g. Temporary wiring
 - h. Water hoses
8. Identify the aisles, passageways and stairways which shall be kept clear and communicate the requirement to everyone.
9. Inspect the work site and the waste containers. If you find unsatisfactory conditions, take corrective action.

31. ELECTRICITY

PURPOSE

To establish the requirements for safe work with electricity.

RESPONSIBILITIES

The Safety Director is responsible for all aspects of the electricity program.

PROCEDURE

1. Lockout procedures must be followed at all times.
2. Employees who are not qualified electricians must be specially trained, with records kept of their training, before doing any work on electrical systems or exposing themselves to electricity
3. Ground fault circuit interrupters must be used on portable power tools and equipment at all times
4. All electrical equipment including tools, cords, receptacles, etc must be inspected before each use.
5. All defective equipment (such as broken plugs, damaged cords, broken receptacles, broken switches, etc.) must be removed from service and destroyed or repaired.
6. All deficiencies (such as missing covers, open panel doors, exposed conductors, unidentified high voltage equipment, unguarded high voltage equipment, etc.) must be corrected immediately.
7. Only authorized, trained electricians can make repairs.
8. No alteration, repair, component replacement, or modification can be made until the equipment has been de-energized and locked out.
9. When trouble shooting must be done with the equipment energized:
 - a. Make sure that another person who is thoroughly familiar with the power off controls is standing by in the immediate vicinity.
 - b. Do not wear any jewelry, such as neck chains, rings, bracelets, wristwatches, etc
 - c. Stand on a dry non-conductive rubber mat or wear dry rubber footwear.

- d. Use appropriate tools and test equipment with proper insulation only.
 - e. Set test equipment for the highest voltage setting at the beginning.
 - f. Use only one hand
10. If energized electrical equipment must be left exposed and unattended, post a warning of the hazard and construct an appropriate barricade or guard.
11. Never use metal ladders or ladders with conductive parts.
12. Never do troubleshooting while on a ladder or with unstable support Even low grade electric shocks can cause serious accidents due to falls or sudden movement of your head into a fixed object.

32. SPILL AND RELEASE PREVENTION

PURPOSE

To establish DiFiore Construction requirements for prevention of spills and releases to the environment.

RESPONSIBILITY

The job superintendent is responsible for controlling spills and releases.

PROCEDURE

1. Keep material safety data sheets for all materials brought to the job site.
2. Develop a spill and release control plan which covers the hazardous materials on the job site, the storage requirements, the use methods, precautionary information, the appropriate regulations, the regulatory agency and the notification contact at the regulatory agency.
3. Bring only one days supply of hazardous materials to the job site.
4. Keep all containers of liquids in impervious secondary containment.
5. Protect sewers, drains, and pits near hazardous chemicals.
6. Include secondary containment on the daily inspections.
7. Remove all hazardous waste materials from the job site daily.

8. If a spill or release occurs, notify the customer and the appropriate authorities immediately.

33. HAZARDOUS WASTE

PURPOSE

To establish DiFiore Construction requirements for safe and environmentally sound disposal of hazardous waste.

RESPONSIBILITY

The job superintendent is responsible for controlling the handling and disposal of hazardous waste.

PROCEDURE

1. Identify all waste materials which may need disposal or recycling during the job.
2. Determine the proper disposal/recycling method for all of these materials.
3. Obtain the appropriate containers for (he wastes
4. Label the containers and place them at the job site
5. Keep records of all materials that are brought to the job site The disposition of all materials must be known This includes materials that evaporate to the atmosphere, materials drained to sanitary or storm sewers, materials disposed of in trash containers and materials that become part of the construction.
6. Include in the project plan our intentions regarding disposition of hazardous wastes. Include an expected mass balance, disposition methods, all material safety data sheets for materials, and by-products, and a statement about the appropriate legislation.
7. Communicate the requirements of the project safety plan to all employees and to the customer
8. Waste disposition is to be included in the daily inspections.
9. All waste is to be removed from the job site daily.