

OSHA SAFETY RULES & REGULATIONS

COMMERCIAL CONSTRUCTION PROJECTS

BY: JG GEIS - OWNER'S REP

TABLE OF CONTENTS	
1. Safety Program	3
2. Implementation Plan	4
3. Safety Policy	5
4. Safety Topics	5-9
5. Safety Meeting Record– Appendix A	10
6. Safety Trainings – Job Site Safety Meetings	11
7. Checklist Procedure	12
8. Painters Safety Checklist	12-13
9. Agenda – Sample	14
10. Fire Drill Preparedness for Heavy Construction	14
11. Sign-In Sheet – Appendix B	15-17
12. Safety Meeting Attendance Record – Appendix C	18
13. Team Leader Assignments	19
14. Job Site Safety and Clean-Up – Daily Rules	20
15. Safety Data Sheets (SDS)	21
16. Personal Protective Equipment (PPE)	22
17. Eye & Face Protection	22
18. Foot Protection	23
19. Respirator Protection	24
20. OSHA'S Mission	25
21. OSHA Safety Guidelines	25
22. Multi Employer Worksites	26
23. Safety – Budgets - Quality Control Management	27
24. Safety Incentive Programs	28
25. Project Safety Program	28-30
26. Accident Records	30-31
27. How Do We Protect the Public?	31
28. Safety Budget	31-32
29. Record Keeping	32
30. Insurance and Bonding Requirements	32
31. Disciplinary Program – Violations – Disciplinary Action	33
32. Purpose of Policy	33
33. Circumstances Leading to Disciplinary Action	33-34
34. Employee Sanctions - Safety Violations	34
35. Summary	34
36. Closing Statement – Obey The Rules	35
37. Resource Material	36
38. There were NO OSHA LAWS prior to 1970	37
39. Remember Safety First – List of Human Cost of Construction	37
40. OSHA Enacted by Congress	38
41. Hoover Dam – Built Between 1931 to 1935	39
42. Hoover Dam Historical Facts	40

SAFETY PROGRAM

It is the primary responsibility of the Owner's Rep to promote a safe working environment for employees, subcontractors and all who enter the job site. The safety and health of all personnel is the first and foremost priority. No person will be required to do a job that is considered unsafe. The company complies with all applicable OSHA workplace safety and health requirements and maintains OSHA Standards that equals or exceeds industry practices.

INITIAL ORIENTATION – Employee Training

New employees receive safety orientation training covering the elements of HAZMAT and HAZCOM. This training consists of general training as follows:

- 1. Location and availability of on site hazards.
- 2. Measures to protect employees from hazards on the job.
- 3. The specific physical and health hazard of chemicals used.
- 4. Explain the importance of chemical labeling on all containers.
- 5. Location and use of SDS Manual located in supervisors office.
- 6. Location and availability of the List of Chemicals used on site.
- 7. Employees receive on the job training from their supervisor covering the proper use, inspection and storage of necessary personal protective equipment and safety training regarding specific chemicals they will be working around.

Annual Refresher Training

Annual Hazard Communication refresher training will be conducted as part of the company's continuing Safety Program.

Immediate On-the-Spot Training

Training is conducted by supervisors for any employee that requests additional information or exhibits a lack of understanding of the use and operation of machinery and tools used.

The following rules shall be observed when working with chemicals:

- Keep each work area clean and orderly.
- Substitute less toxic products when possible.
- Read and understand the Safety Data Sheets.
- Store incompatible chemicals in separate areas.
- Label and identify every container of its contents and hazards.
- Have Spill Kits available nearby if containers break or spills occ

IMPLEMENTATION PLAN

All employees / Sub-Contractors are supervised by a Team Leader (Leader). Leaders will conduct monthly meetings informing new comers of rules and guidelines.

The purposes of the monthly meeting is to:

- 1. Communicate basic safety practices and procedures
- 2. Identify and report unsafe conditions in the workplace
- 3. Provide employees an avenue to mitigate unsafe workplace conditions
- 4. Regularly remind and communicate to employees the importance of safety at work

TEAM ASSIGMENTS

Current records of employees shall be maintained and copies given to Team Leaders. Records are kept in three ring binders for OSHA Inspectors viewing.

MONTHY SAFETY MEETINGS

Meetings are set monthly. Subject matter covered each month is prescribed as outlined in this document. In addition to the prescribed content for each meeting, participants are asked to report any unsafe conditions immediately, upon noticing the deficiency.

Meeting length shall be limited to 15 minutes. If 15 minutes proves insufficient, the leader shall assign follow up activities and schedule a follow up meeting if required. Short meetings are designed to remind employees of the importance of safety, not to cover every possible topic or to become a "jam session." The strategy is frequency, repetition, and indoctrination of safety, not boredom.



MAKE CORRECTIONS OF UNSAFE CONDITIONS

If an unsafe condition is reported and can be reasonably abated by company employees, it shall be done. Otherwise, an outside contractor will be employed to remedy the situation. When an appropriate party is not known or not available, then the condition shall be reported to appropriate Team Leader and Supervisor.

SAFETY POLICY

ATTENDANCE

100 percent attendance by employees and subcontractors is the goal. Anyone missing the regular monthly meeting must make up attendance by attending another team leader's meeting.

MEETING RECORDS

Each Leader shall be assigned to complete a meeting record (Appendix A) that includes as a minimum; date and time (see Appendix B) an attendance record (see Appendix C.) Any reported unsafe condition shall be described in the record along with an agreed upon corrective action. A copy of the attendance and meeting records shall be forwarded to the Warehouse Supervisor. The Warehouse Supervisor will publish a monthly list of employees who are required to make up missed meetings.

TEAM LEADER ASSIGNMENT RECORD

A current record of Team Leader Assignments shall be retained as (Appendix D).

TEAM LEADER TRAINING

Team Leaders are assigned the responsibility of conducting monthly safety meetings and shall attend supervisor safety trainings at a minimum of six-month intervals. The QHSE Manager shall coordinator and schedule periodic pod leader trainings through outside consultants retained by the company.

Unless otherwise directed Monthly Safety Topics shall be as follows:



January – Eye Protection

- 1. No glasses no work
- 2. Must fit closely around face
- 3. Some eye injuries are irreversible
- 4. Do not simply dangle around neck
- 5. New glassed available, see supervisor
- 6. Safety Glasses required in all work areas, shops, and warehouse

February – Housekeeping

- 1. Spills
- 2. Pallets
- 3. Trash containers
- 4. Work area cleanliness
- 5. Trash accumulation limits
- 6. Daily and weekly maintenance
- 7. Sweeping equipment availability
- 8. Storage of unneeded material away from work station

March – Company Safety policy

- 1. Important to each employee
- 2. Uniformly applied to all
- 3. Supported by all

April – Ear Protection

- 1. When needed
- 2. Noise reduction
- 3. Available protection
- 4. Cumulative effect of loud noise
- 5. Result of long term exposure to noise

May - Equipment Operation

- 1. Specific equipment used by those present
- 2. Dangers posed by specific equipment
- 3. Applicable safety measures
- 4. Tool adjustment
- 5. Guards, shields
- 6. Warning signs
- 7. Moving parts
- 8. Cleanliness



June - Fork Lift Operation

- 1. Drivers License Requirements
- 2. Fork Truck Training
- 3. Lift Maintenance
- 4. Battery Safety



July - Eye Protection

- 1. Safety Glasses required in all work areas, shops, and warehouse
- 2. New glassed available See Supervisor
- 3. Some eye injuries are irreversible
- 4. Must fit closely around face
- 5. Do not dangle around neck
- 6. No glasses no work

August - Housekeeping (Go Over Every 6 months)

- 1. Spills
- 2. Pallets and Crates
- 3. Trash containers
- 4. Work area cleanliness
- 5. Trash accumulation limits
- 6. Daily and weekly maintenance
- 7. Sweeping equipment availability
- 8. Storage of unneeded material away from work station

September – Lifting

- 1. Posture
- 2. Caution
- 3. Dangers
- 4. Weight limits
- 5. Repetitive motion limits
- 6. Assistance when required
- 7. Technique-injury avoidance



October- Climbing

- 1. Safety lines
- 2. Safety harness
- 3. Equipment condition
- 4. Electrical Panels and Disconnects
- 5. Common dangers, slipping, unstable footing





November – Respirator Protection

- 1. Types
- 2. Custom fit
- 3. Filter types
- 4. When needed
- 5. Paint Booth Safety

December – First Aid – Mounted at each Pod Leaders work Station

- 1. Location
- 2. Availability
- 3. Defibrillators
- 4. When to call 911
- 5. Eye wash stations



SAFETY MEETING RECORD – Appendix A

Date:	
Trainer:	
TOPIC COVERED:	
UNSAFE CONDITIONS REPORTED	
ACTIONS TAKEN OR PLANNED TO ABA	ATE UNSAFE CONDITIONS



SAFETY MEETING

CAUTION - DUMPSTER FIRES RESULT FROM SPONTANEOUS COMBUSTION

SAMPLE

TIME:	
PROJECT: Job Site Meeting SAFETY OFFICER CONDUCTING MEETING:	JG GEIS
ATTENDEES NAME	TELEPHONE #
1	
2	
3	
4	
5	
6	
7	
8	

DATE:

CHECKLIST PROCEDURE

- SAFETY RULE #1: THE FIRST PERSON WHO SEES AN OSHA VIOLATION, TELL YOUR SUPERVISOR AND/OR FIX THE SITUATION IMMEDIATELY.
- FRIDAY MORNING'S: CLEAN JOB SITE FOR WEEKEND. PREPARE FOR DUMPSTER PICK-UP.
- NO SMOKING ON JOB SITE. THIS IS A NO SMOKING WORK PLACE.
- DAILY END OF SHIFT: DOUBLE CHECK WORK AREAS REMOVING ALL PAINT OR OILY RAGS. PUT TRASH & DEBRIS IN DUMPSTER.
- NO OPEN CONTAINER: MUST HAVE AIRTIGHT LIDS ON ALL PAINT CANS & SOLVENTS.
- STORE UN-USED PAINT IN STORAGE SHED AWAY FROM BUILDING.
- BE AWARE: IF SOMEONE SEES SOMETHING OUT OF PLACE, FIX IT.
- <u>TEAMWORK</u>: EVERYONE WORKS TOGETHER TO INSURE A SAFE WORKPLACE.
- SUPERVISORS OF ALL TRADES TO OVERSEE AND ENFORCE THESE PROCEDURES.
- REMEMBER SAFETY FIRST.
- IF YOU HAVE QUESTIONS, ASK.
- Jobsite Safety, MSDS Sheets, Safety Boots, Protective Eye Wear. First Aid Kits are located in Shipping Container.
- REMEMBER OSHA SAFETY GUIDELINES.
- IMPLEMENT COST SAVING MEASURES.
- EACH CREW RESPONSIBLE FOR THEIR OWN CLEAN UP OF WORK AREAS. (Stop Working 15 minutes prior to quitting for the day and clean up your work area at Job Site).
- ITS BEST TO CLEAN WORK AREAS ON A DAILY BASIS. KEEPING A CLEAN AND ORDERLY JOB SITE ALWAYS IMPRESSES THE OWNERS AND INSPECTORS.
- JOB TOOL BOXES HELPS KEEP YOUR WORK SPACE ORGANIZED.



PAINTERS SAFETY CHECKLIST

- DAILY END OF DAY, REMOVE ALL OILY RAGS & TRASH, PUT IN DUMPSTER.
- END OF DAY: STORE UNUSED PAINT OUTSIDE BUILDING IN STORAGE SHED.
- NO OPEN CONTAINERS: KEEP LIDS ON PAINT CANS & SOLVENTS AT NIGHT & WEEKEND.
- **SAFETY FIRST:** IF YOU SEE SOMETHING'S NOT RIGHT, FIX IT IMMEDIATELY OR TELL YOUR SUPERVISOR.
- BEWARE: IF YOU SEE ANYTHING OUT OF PLACE, FIX IT!
- **SUPERVISORS:** OVERSEES THESE PROCEDURES.
- TEAMWORK: INSURES A SAFE WORKPLACE.



IF YOU HAVE QUESTIONS - ASK!

BY: JG GEIS-OWNER'S REP File: OSHA Safety Manual

AGENDA SAMPLE

SAFETY MEETING DATE & TIME: (Tuesday) 8:56 am to 9:20 am = 24 min.

3131 and 3139 WAREHOUSES HOUSTON TX 77091 SAFETY OFFICER CONDUCTING MEETING: J.G. GEIS

NOTES: Before starting fire drill called 24 Hr. Monitoring, Used Operator 78 to disarm systems and Operator 72 to reset alarm systems. Took 8 minutes to evacuate buildings. Had roll call and announcements.

Total Attendees = 52

- EVERY FRIDAY: Trash out of buildings. Marciella Sanchez empties lunch-room trash cans and put in big dumpster daily every Friday.
- FIRE EXTINGUISHER: How to use. Pull pin and spray around base of fire.
- Empty ALL Trash cans and dispose of oily rags, put into dumpster.
- SUGGESTIONS: ______.

FIRE DRILL - PREPAREDNESS FOR MULTI-STORY CONSTRUCTION

HEALTH & SAFETY OF ALL EMPLOYEESWhen Foghorn Sounds – Move to Ground Floor

- 1. Act quickly if you hear fire alarm.
- 2. Turn off equipment you're using.
- 3. Close doors not needed for escape.
- 4. Alert other employees of the emergency.
- 5. Assist anyone needing help during evacuation.
- 6. Leave area by your assigned exit or closest safe exit.
- 7. Go directly to designated Muster Station for further instructions.
- 8. DO NOT block pathways of Access and Egress.
- 9. Give way to Emergency Vehicles and Crews.
- 10. WAIT in Muster Station until everyone is accounted for or given further instructions

SIGN-IN SHEET – Appendix B

1	
2	
3	

23.	
24.	
25.	
27.	
37.	
38.	
39.	

48.		
	·	
	·	
56.		
	·	
59.		

${\bf SAFETY\ MEETING\ ATTENDANCE\ RECORD-Appendix\ C}$

DATE & TIME:	
TRAINER:	·
PRINT NAME	CELL PHONE
	
	-

$TEAM\ LEADER\ ASSIGNMENTS-Appendix\ D$

DATE & TIME:	
GROUP # AND PRINT NAME	CELL PHONE NUMBER



JOB SITE SAFETY & CLEAN UP

DAILY RULES

- 1. Safety First.
- 2. Starting Time: 7:00 a.m. Unless otherwise advised.
- 3. Everyone is to clean up his work areas on a daily basis.
- 4. Once a week everyone helps with thorough Shop cleaning.
- 5. Each person is to keep track of his time cards on a daily basis.
- 6. DO NOT THROW TRASH ON THE GROUND, USE TRASH CANS!
- 7. Do not operate any tool until you've been instructed on its use, operation, & safety.



Safety Data Sheets: Provided by the chemical manufacturer to provide additional information concerning safe use of the product.

Employee Use of SDS

For SDS use to be effective, employees must:

- Know the location of the SDS
- Check SDS when more information is needed
- Locate emergency information on SDS sheets
- Follow the safety practices on the SDS sheets
- Understand the major points for each chemical

PERSONAL PROTECTIVE EQUIPMENT (PPE)

Purpose: Tech Seal provides all Employees with required PPE to suit the task and known hazards. This Chapter covers the basic requirements for Personal Protective Equipment with the exception of PPE used for hearing conservation and respiratory protection or PPE required for hazardous material response to spills or releases.

General Policy: Safety controls are set to eliminate or minimize hazard exposures in the workplace. When such controls are not practical or applicable, personal protective equipment (PPE) shall be employed to reduce or eliminate personnel exposure to hazards. Personal protective equipment will be provided, used, and maintained when it has been determined that its use is required and that such use will lessen the likelihood of occupational injuries and/or illnesses. Company owned equipment to be maintained by company.

EYE & FACE PROTECTION

The majority of occupational eye injuries can be prevented by the use of suitable approved safety spectacles, goggles or shields. Approved eye and face protection shall be worn when there is a reasonable possibility of personal injury. Each employee shall use appropriate eye or face protection when exposed to eye or face hazards.

Eye / Face Protection Specifications: Eye and face protectors issued to and used by employees, contractors and visitors. Safety glasses provide adequate protection against the particular hazards for which they are designed.

Safety Spectacles: Protective eye glasses are made with safety frames, tempered glass or plastic lenses, temples and side shields which provide eye protection from moderate impact and particles encountered in job tasks such as carpentry, woodworking, grinding, scaling, etc.

Welders: Welders goggles provide protection from sparking, scaling or splashing metals and harmful light rays. Lenses are impact resistant and are available in graduated shades of filtration.

Face Shields: These normally consist of an adjustable headgear and face shield of tinted or transparent acetate or polycarbonate materials or wire screen. Face shields are available in various sizes, tensile strength, impact, heat resistance and light ray filtering capacity. Face shields will be used in operations when the entire face needs protection and should be worn to protect eyes and face against flying particles, metal sparks, and chemical splash.

Welding Shields: These shield assemblies consist of vulcanized fiber or glass fiber body, a ratchet-button type adjustable headgear or cap attachment and a filter and cover plate holder. These shields will be provided to protect workers' eyes and face from infrared or radiant light burns, flying sparks, metal spatter and slag chips encountered during welding, brazing, soldering, resistance welding, bare or shielded electric arc welding and oxyacetylene welding and cutting operations.

FOOT PROTECTION

General Requirements: Each affected employee shall wear protective footwear when working in areas where there is a danger of foot injuries due to falling or rolling objects, or objects piercing the sole, and where employee's feet are exposed to electrical hazards.

Selection Guidelines for Foot Protection:

Safety shoes and boots provide both impact and compression protection. Where necessary, safety shoes shall be obtained by employee to provide puncture protection. In other special situations electrical conductive or insulating safety shoes may be required. Safety shoes or boots with impact protection would be required for carrying or handling materials such as packages, objects, parts or heavy tools, which could be dropped and for other activities where objects might fall onto the feet. Safety shoes or boots with compression protection would be required for work activities involving skid trucks, manual material handling carts, around bulk paper rolls and around heavy pipes, all of which could potentially roll over an employee's feet. Safety shoes or boots with puncture protection would be required where sharp objects such as nails, wire, tacks, screws, large staples, scrap metal are used.

RESPIRATORY PROTECTION

Purpose: Tech Seal Int'l is committed to providing a safe and healthy work environment for its employees. On occasion, employees may be exposed to airborne contaminants. In an effort to limit their exposure safety equipment is required.

Scope and Application: This program applies to any employee who is required to wear a respirator during normal work activities and emergencies. Any employee who requests to use a respirator when such use is not required may be supplied with a respirator by the employer or may be permitted to use his or her own.

Employees: Employees who wear respirators must use them in accordance with the instructions and training provided. Employees must maintain their respirators. Any employee wearing a respirator in a hazardous area must take periodic breaks in a safe area. If the respirator does not work properly on the job, the employee must go to a safe area immediately and report the problem to their supervisor. Refer to Tables 2 and 3 for cleaning and disinfecting.

Table 2—Respirator Cleaning and Disinfecting Intervals

Respirators issued for the exclusive use of an employee	Clean and disinfect as often as necessary to be maintained in a sanitary condition.
Respirators issued to more than one employee	Clean and disinfect after being worn by each user.
Respirators maintained for emergency use	Clean and disinfect after each use.
Respirators used in fit testing and training	Clean and disinfect after each use.

Table 3—Respirator Inspection Intervals

Respirators used in routine situations	Inspect before each use and during cleaning.
Respirators used in emergency situations	Inspect at least monthly, in accordance with manufacturers' recommendations; check for proper function before and after each use.
Respirators used for emergency-escape-only situations	Inspect just before use.

OSHA'S MISSION:

With the <u>Occupational Safety and Health Act of 1970</u>, **Congress** created the <u>Occupational Safety and Health Administration (OSHA)</u> to ensure safe and healthful working conditions for working men and women by setting and enforcing standards and by providing training, outreach, education and assistance.

GENERAL PROCEDURES

Under the Workman's Compensation Law, a Prime Contractor OR Supervisor is deemed the manager of all employees performing work at the job site. This also includes sub-contractors and their sub-contractor's employees. Therefore, the following information is important for each new employee to gain a greater understanding of our management obligations.

1. OSHA SAFETY GUIDELINES

- 1.1 The Construction Safety Act of 1969 and the Occupational Safety and Health Act (OSHA) of 1970 made it possible for a Director of Labor to conduct unannounced site inspections to see if employers are complying with safety standards.
- 1.2 Admission of an OSHA inspector may be voluntary OR the inspector must first obtain a search warrant from the Circuit Court to enter work place.
- 1.3 If at any time a Director of Labor (OSHA) requests right of access entry to inspect the job site working conditions, a supervisor MUST accompany the inspector at all times.
- 1.4 The inspection may only be conducted as a part OSHA's general administrative plan for enforcement of the act.
- 1.5 For situations where there are 30 or more employees, an appointment is recommended. Then arrange appropriate supervision while making safety inspections to comply with OSHA standards.
- 1.6 OSHA targets employers with a higher probability of safety violations.
- 1.7 The employer is required to port records of citations and notices of employees' rights at the jobsite.
- 1.8 The employer has fifteen (15) days to contest a citation.
- 1.9 If a citation is contested a formal hearing is held at the Commission Review Board.
- 1.10 Enforcement of Commission Orders is managed U.S. Court of Appeals.

- 1.11 If the citation is not contested, it becomes final.
- 1.12 When using personal safety life lines; the minimum size nylon rope allowed is ½ inch in diameter and shall not exceed 6 feet in length.
- 1.13 Fire Extinguishers: Use Type A-2 extinguishers spaced every 100 feet.
- 1.14 Electrical fire extinguishers: Use carbon dioxide (CO2) extinguishers.
- OSHA requires the posting of certain job related information. The failure to do so can result in a civil penalty citation of \$1,000.00 (+) per day for failure to correct citations within the proposed time period.
- 1.16 Serious violations of safety standard shall be assessed fines of \$1,500.00 (+) per violation.

2. MULTI EMPLOYER WORKSITES

- 2.1 The matter of duty and responsibility under the OSHA Act can become very involved on a multi-employer site.
- 2.2 OSHA's position requires that each employer provide its employees a job site that is free from recognized hazards.
- 2.3 Since 1981, OSHA has focused its attention to the "controlling employers" who have direct control over abating job hazards.
- 2.4 It is most probable "that the employer most responsible for and best able to correct a job hazard will receive the citation."
- 2.5 Under the OSHA policy's legitimate defense provisions, a citation will not be issued to an exposing employer that can prove it meets the following criteria:
 - 1) It did not create the unsafe condition.
 - 2) It does not have the authority or ability to correct the hazard.
 - 3) It has made a reasonable effort to persuade the controlling employer to remedy the hazard, and
 - 4) It has taken feasible steps to minimize its employee's exposure.

"If all employees at the site meet the four (4) conditions, the employer best able to have corrected the hazard or to ensure its correction is issued the citation. The controlling employer will also be cited even though no employees of that employer are exposed to the condition."

2.6 "A prime contractor or a sub-contractor cannot delegate or contract away its responsibility under the Act. A general contractor can, however, put a clause in its sub-contracts requiring the sub-contractor to reimburse the general contractor for any losses sustained by reason of the sub-contractor's failure to abide by safety regulations or general duty of care in conducting its activities at the jobsite. To assure that safety and health requirements are

met, the general contractor is well advised to see that its sub-contracts required scrupulous adherence to safety and health regulations."

2.7 The National Labor Relations Board (NLRB) has ruled that safety regulations, as an essential part of the terms and conditions of employment, are mandatory subjects of bargaining whenever either party places the issue on the bargaining table.

3. SAFETY - BUDGET - QUALITY CONTROL MANAGEMENT

- 3.1 The manager who can:
 - 1) Provide a safe place to work.
 - 2) Provide safe tools and equipment.
 - 3) Enforce safety rules, and
 - 4) Provide safeguards against occupational dangers can generate employee loyalty, have a more efficiently run project and produce a higher level of quality controls.
- 3.2 A written safety policy is <u>important</u> in the enforcement of safety rules by supervisors.
- 3.3 Safety for the project must be addressed as a company objective along with productivity, quality control and performance issues.
- 3.4 Each sub-contractor's company safety program shall include:
 - 1) The company's safety organization,
 - 2) Safety training and personal protection,
 - 3) First aid training,
 - 4) Fire prevention,
 - 5) Safety recordkeeping,
 - 6) Jobsite inspection, and
 - 7) Accident and hazard reporting

Basically, the objective is for each company to have in place an accident prevention program to eliminate both the unsafe act and unsafe condition. This is present in the cause of any accident.

- 3.5 Accidents are the result of unsafe employee actions that result from personal carelessness or the lack of safety training. Such acts can be prevented by safety education for the individual worker and enforcement of safety regulations. Studies by insurance companies disclose that unsafe actions by employees are present in more than 80% of all construction accidents.
- 3.6 Merely checking the job site for unsafe conditions is not sufficient.
- 3.7 Training Programs:

To assist field supervisors with proper safety planning of their projects and how to educate workers on how to properly perform their task are essential.

Many agencies are available to provide various kinds of aid and assistance in regard to safety training programs, some of which are as follows:

- U.S. Department of Labor
- Insurance Companies
- American National Standard Institute
- National Safety Council
- Contractor Associations
- American Red Cross

Because of the differences in organizations, types of activity and dissimilar scope of operations, each sub-contractor must develop an accident prevention program that fits their own particular situation.

4. SAFETY INCENTIVE PROGRAM

- 4.1 Accident prevention must be designed into each construction project.
- 4.2 The constantly changing nature of a project under construction does not allow the detection and elimination of hazards purely on an experimental basis. The contractor must establish in advance of each project, the particular hazards that the proposed methods, procedures and equipment will create and then devise an accident prevention plan to combat them.
- 4.3 Safety contests between company project teams could be useful in increasing employee morale, safety and loyalty. During a special meeting, project superintendents with the best safety record may be recognized and presented with cash awards substantial enough to be appreciated. Other rank and file workers could be encouraged through the awarding of cash prizes for their safety suggestions and slogans.

5. PROJECT SAFETY PROGRAM

The following is a safety guideline for each sub-contractor to review in appraisal of their safety policies and procedures.

- 5.1 Field operations must be accompanied by the implementation of the following suggested steps to enforce the safety program during construction activities:
 - A) Assign prime responsibility for the project safety plan and its enforcement to a safety engineer who coordinates the overall plan and devotes his time and energy exclusively to matters of safety, first aid, sanitation, fire prevention, etc. Under him, each craft superintendent is made responsible for safety measures as applied to his group. Because the foreman/superintendent is with the crew the majority of the time, they are best able to monitor and watch for unsafe practices or conditions. They must promote safety by instruction, precept and example.
 - B) Provide a suitable, adequate and readily available first aid station. The minimum requirement for supervisors, superintendents and foremen is

- CPR certified from an emergency medical assistance program. Locations of the nearest hospital facilities and ambulance service telephone numbers to be permanently posted in the job office. First aid kits to be industrial type, dustproof, easily available and checked at frequent intervals for any replenishment's needed. Every person on the jobsite is to be informed as to where first aid facilities are located (This should be included as part of the accident waiver form signed by all visiting parties).
- C) Provide safety indoctrination for all new personnel to acquaint them with the company safety policy and to provide direction and rules needed to perform their work in a safe and orderly fashion. The facilitator will stress that strict conformance with safety regulations is a condition of employment. Special safety instructions must be given for particularly hazardous work. Every employee should be instructed to report any injury, however trivial, immediately to his foreman and to obtain suitable first aid treatment.
- D) Insist on the wearing and proper use of personal protective clothing and equipment with no exceptions.
- E) Conduct periodic "toolbox" safety talks and demonstrations on the project for all work crews. Merely prodding workers "to be careful" is not likely to accomplish much. Information as to the proper use of tools, handling of materials, building of scaffolds and operation of equipment can be topics of successful meetings. The material must be specific, practical and pertinent to current operations. Suggestions for improved safety should be solicited from the workers.
- F) Use safety posters, safety instruction cards, and warning signs.

 Prominent display of the project accident record, as well as notices that remind workers of specific project safety requirements, can be very effective.
- G) Periodic meetings of the safety engineer, superintendent, craft foremen, and other supervisors are essential to review job safety and to make necessary revisions to the program. Investigate all lost-time accidents and devise corrective measures to prevent their recurrence.
- H) Provide adequate, suitable and easily accessible fire-fighting equipment and materials. Because welding and flame cutting are among the most frequent causes of construction fires, special regulations must apply to these activities. Specific areas should be provided for the storage of flammable, combustible, and explosive material.
- I) Establish a program of periodic job safety inspections. The inspection team must include the company safety specialist and the top field supervisor. Notes of safety violations and job hazards should be made and immediate action taken to correct them.
- J) Insist on good project housekeeping. Designated storage areas for materials, tools, and supplies should be maintained and used. Rubbish and waste material should be removed promptly from the area of operations.
- K) See that regular equipment maintenance includes safety inspection. This maintenance should include inspection of accident hazards such as frayed cables, bad tires, slipping clutches, and electrical grounds. Inspection and maintenance should not be limited to mechanical

- equipment, but should be extended to scaffolding, towers, ladders and other non-operating items.
- L) Seek and obtain the full cooperation of all sub-contractors on the project. All of the measures previously described must include sub-contractor personnel as well.

6. ACCIDENT RECORDS

- 6.1 Accidents records can pinpoint the location and cause of job injuries and illness can be useful tool for planning future accident prevention programs.
- 6.2 A daily record/log book should be set up and maintained for each project. Every job injury or illness is made a matter of record, regardless of how minor it may appear.

Procedure:

- 1) Each entry to include date, name of employee affected, nature of the injury or illness, first aid treatment given on the site, and other pertinent information.
- 2) Fill out a first report of injury. It is prepared for every incident that requires off-site medical treatment, regardless of whether time is lost from work or not.
- 3) Fill out an accident prevention form prepared by the appropriate foreman for each recordable injury or illness. It is directed toward analyzing the accident and determines how it could have been prevented.
- 6.3 The above are good management practices for accident prevention; however, OSHA requires that occupational injury and illness records be kept for all employees.

These records include:

- 1) A log and summary of occupational injures and illness (OSHA Form 200)
- 2) A supplementary record of occupational injuries and illness which contains detailed information on individual accidents (OSHA Form 101)
- 3) An annual summary of occupational injuries and illness. The log must record all cases resulting in medical treatment, loss of consciousness, restriction of work or motion, or transfer to another, less taxing job.

Any fatality or any accident that hospitalizes five or more employers must be reported to the OSHA Area Director within 48 hours.

- 6.4 Work injury and illness recording OSHA requires that employers keep certain records pertaining to recordable occupational injuries and illness. Recordable cases are the following:
 - A) Occupational deaths, regardless of the time between injury and death, or the length of the illness;

- B) Occupational injuries which involve one or more of the following: loss of consciousness, restriction of work or motion, transfer to another job, or medical treatment other than first aid:
- C) Occupational illness which involved one or more of the following: loss of consciousness, restriction of work or range of motion, transfer to another job, or medical treatment other than first aid.

Recordable cases are classified as follows:

- A) Total recordable cases. The sum of all recordable occupational injuries and illness, including death lost-workday cases and nonfatal cases without lost workdays:
- B) Deaths;
- C) Total lost-workday cases. The sum of cases involving days away from work and/or days of restricted activity;
- D) Nonfatal cases without lost workdays. The sum of cases which are recordable injuries or illness which do not result in death or lost workdays, either days away from work or days of restricted activity;
- E) Total lost workdays. The sum of days away from work and days of restricted work activity.

7. HOW DO WE PROTECT THE PUBLIC?

- 7.1 People are innately curious and are capable of many thoughtless actions in their attempt to view a construction project. From the standpoint of both safety and public relations, a viewing, platform could possibly be constructed to allow the public to view the site from a controlled vantage view.
- 7.2 The problem of protecting the public becomes more difficult on weekends and other times when job operations are not in progress.
- 7.3 Children, in particular, seem to be attracted to construction projects during off-hours. To avoid injuries of pedestrians, the security staff officers must make special provisions for these additional hazards in the job safety plan.

8. SAFETY BUDGET

- 8.1 A common rule of thumb to establish an effective company safety program will have a cost of about 2.5 percent of the direct labor expense.
- 8.2 Safety is a very important consideration for the proper planning of the construction management process.
- 8.3 The safety cost will need to be factored into the other operating budget allowances.
- A well-designed and implemented accident prevention program can achieve a faster, smoother and more efficiently run operation.

9. RECORD KEEPING

- 9.1 Texas Employment Security Law requires that employers keep accurate records of their employees for at lease five (5) years after the calendar year in which the wages are earned.
- 9.2 Contractors are required by the Contractor's License Board to keep records showing all contracts, documents, records, receipts and disbursements for a period of at least three (3) years after completion of a project.
- 9.3 Internal Revenue Service records shall be kept for a period of four (4) years after completion of the project.
- 9.4 The contractor/owner shall maintain the above records according to minimum state requirements, but shall elect to maintain and keep all such records for a total duration of six (6) years after completion of the contract. At such time when the statute of limitation expires, the Company shall dispose of records according to company policy.

10. INSURANCE AND BONDING REQUIREMENTS

Note: The Prime Contractor, must carry a contingent liability for the actions of its sub-contractors. Therefore, it is to our best advantage to consult with a National Surety Bonding agent, as well as a National Insurance Brokerage firm who can recommend the best plan of coverage.

- 10.1 With regard to project insurance requirements, it is always good practice for a contractor to submit a copy of the contract documents to the insurance company prior to construction commencement.
- 10.2 Certain types of insurance are required by law. The contractor must provide them whether or not they are called for by the contract.
- 10.3 The law makes the independent contractor liable for damages caused by its own acts of omission or commission.
- 10.4 As a prime contractor, we have a contingent liability for the actions of our sub-contractors.
- 10.5 Therefore, as a practical matter, we must procure several different categories of liability insurance to protect us from liability for damages caused by our own operations as well as those caused by sub-contractors.

DISCIPLINARY PROGRAM - VIOLATIONS - DISCIPLINARY ACTION

Purpose: The purpose of this program is to establish a firm but fair disciplinary action policy to enforce the safety system.

Scope: This document is applicable to all employees.

Responsibilities: It is the responsibility of each and every person employed by Tech Seal International to work in a safe and efficient manner. The safety system provides guidelines and procedures to help insure that safe work practices are observed. In the event that any employee violates provisions of the Tech Seal International safety system or works in a manner that threatens their own health and safety or the health and safety of the employees around them, they will be subject to disciplinary action, up to and including termination of employment.

This program is effective only if Supervisors enforce the following to promote Job Safety.

- Whenever a supervisor, or other member of management observes an employee committing an unsafe act or creating or allowing a hazardous condition to exist, a Safety Violation Notice should be completed. A copy of the violation form should be retained in the employee's personnel folder, and each time a new violation form is received, the employee's file will be reviewed for previous violations. Where previous violations appear during a 12-month period, the sanctions listed below will be implemented.
- 2. The Safety Coordinator will investigate any violation of the safety procedures and any accident where the cause is not clear. Their recommendation as to cause, preventable or non-preventable, will be made to the management.
- 3. If the employee feels they have been treated unjustly, they will be allowed to appeal the decision. The Safety Coordinator and the employee's supervisor will review the appeal.

This policy is intended to provide rules and guidelines for administering disciplinary action to subcontractors/vendors, and employees who violate company policy regarding, OSHA's Environmental Health & Safety rules and procedures or who, by their record or actions, indicate a disregard for the health and safety of co-workers, public and property.

Health and Safety related disciplinary action to be administered by the Safety Coordinator or a member of the upper management team.

CIRCUMSTANCES LEADING TO DISCIPLINARY ACTION

Listed below are conditions that could be considered for disciplinary action under the provisions of this policy. Violation of a supervisor's health and safety related instructions:

- 1. Violation of established health and safety rules and/or procedures.
- 2. Violation of instructions on posted health and safety related signs.
- 3. Lack of concern toward health and safety instructions and programs.
- 4. Obvious unsafe actions as may be indicated by the improper use of equipment, horseplay or practical joking, poor housekeeping practices, etc.

The above circumstances are not intended to be all-inclusive. Any other circumstances that indicate an employee's disregard for their own health and safety, of others, or the neglect of proper care for equipment, may also result in disciplinary action under the provisions of this policy.

EMPLOYEE SANCTIONS - SAFETY VIOLATIONS

The following sanctions apply for violations of safety procedures or involvement in a preventable accident:

First Incident	Verbal warning with documentation
Second Incident	Written warning with possible \$300 fine
Third Incident	Disciplinary action up to 2 days discharge and \$600 fine
Fourth Incident	Discharge and \$1200 fine

These guidelines do not supersede the Texas "At-will" employment conditions as stated in the company employee handbook.

SUPERVISION SANCTIONS

The above sanctions also apply to supervision that will also be subject to disciplinary action when their employee receives some form of disciplinary action as noted above, or who demonstrate negligence in their implementation or enforcement of written policy. Any member of supervision may be subject to these disciplinary guidelines as an individual or as a member of management.

SUMMARY

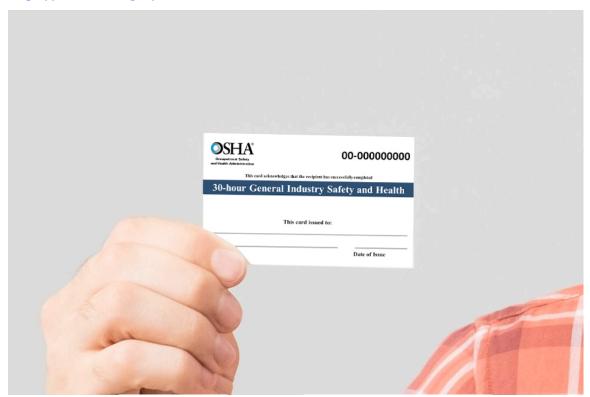
The above disciplinary actions are a minimal guideline. Depending on the circumstances or the severity of the violation or incident, any level of discipline, this is most appropriate for the time and action up to and including termination, employee or supervision, may be implemented.

Approved by: _	· · · · · · · · · · · · · · · · · · ·	. Date:	
	<u> </u>	Daic	

RESOURCE MATERIAL

OSHA WEB LINKS: https://www.osha.gov/recordkeeping/

OSHA's MISSION: With the <u>Occupational Safety and Health Act of 1970</u>, Congress created the <u>Occupational Safety and Health Administration (OSHA)</u> to ensure safe and healthful working conditions for working men and women by setting and enforcing standards and by providing training, outreach, education and assistance: https://www.osha.gov/aboutosha



All Employees Should Take a Basic 30 Hour Hazard Awareness Class

By: OSHA-Authorized Trainers

TRAINING REQUIREMENTS IN OSHA STANDARDS:

https://www.osha.gov/Publications/osha2254.pdf

CONSTRUCTION INDUSTRY GUIDELINES:

https://www.osha.gov/doc/index.html

TRAINING:

https://www.osha.gov/dte/

PERSONAL PROTECTIVE CLOTHING (PPE):

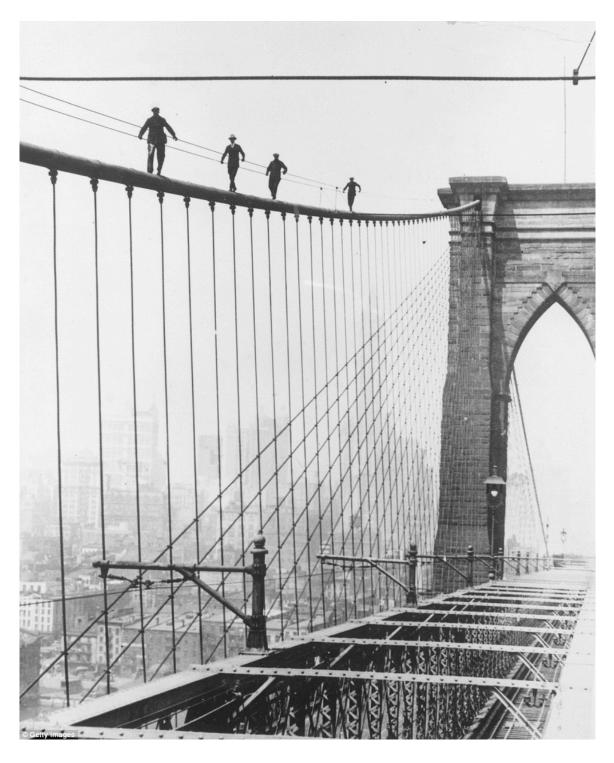
PPE notes excerpted from Mid-South Safety & Environmental Consulting Safety Manual



REMEMBER - SAFETY FIRST ABOVE ALL ELSE

FAMOUS BUILDING PROJECTS OF THE WORLD

- During the early era of building skyscrapers, it was said, "one worker died for every \$1million spent on the building".
- Suez Canal 1859-1869 w/120,000 deaths w/1.5 million workers.
- Brooklyn Bridge 1869-1883 w/27 workers died building bridge prior to opening in 1883.
- Eiffel Tower 1887-1889 Only one death due to extensive use of guardrails & safety screens.
- Panama Canal 1903-1914 w/30,609 deaths. Deadliest project w/408 deaths / 1,000 workers.
- Sydney Harbor Bridge 1923-1932 w/16 deaths.
- Chrysler Building 1928-1930 Zero deaths w/3,000 workers.
- Empire State Building 1929-1931 w/5 deaths in 13 months w/3,400 Workers. Designed by architecture firm Shreve, Lamb & Harmon.
- San Francisco Bay Bridge 1933-1936 w/28 deaths spurred the creation of safety nets on similar projects in the future. Chief Engineer Joseph Strauss made safety a top concern and spent \$130,000 on safety nets.
- Golden Gate Bridge 1933-1937 w/11 deaths. First project in US requiring hardhats.
- World Trade Center 1960-1970's recorded 60 deaths.
- Sears Tower 1970-1974 w/5 deaths designed by Skidmore, Owens & Merrill.
- Las Vegas's City Center 2006-2009 w/6 deaths.
- Interactive Timeline: https://safer-america.com/famous-construction-projects-of-the-world/



Brooklyn Bridge: 27 workers died prior to opening in 1883. The interview to become a painter consisted of being able to walk the span between 2 pillars.



HOOVER DAM HISTORICAL PHOTOS







HOOVER DAM STATISTICS

The "official" number of fatalities involved in building **Hoover Dam** was 96 deaths. These 96 "industrial fatalities" were causes from drowning, blasting, falling rockslides, falls from canyon walls, heavy equipment and truck accidents.

- 21,000 workers from 47 states built Hoover Dam.
- Project was built in less than 5 years from 1931 to 1935.
- Workers earned on average .825 or 82.5 cents per hour or \$7 per day for an 8 hour day.



OSHA WAS ENACTED BY CONGRESS - 1970

- To Ensure Safe and Healthful Working Conditions -



OBEY THE RULES AND EVERYONE GOES HOME SAFE