

SHARP MINDS. SUPERIOR CONSTRUCTION.



ENVIRONMENTAL HEALTH and **SAFETY PROGRAM**

TAB I



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I.

Policy, Commitment, and Employee Participation



POLICY, COMMITMENT, AND EMPLOYEE PARTICIPATION

Safety, Health, and Environmental Policy

People are our most important asset and their safety is our greatest responsibility. It is our policy that every employee is entitled to a safe and healthful place to work.

When a person enters the employ of our company, he or she has a right to expect that he/she will be provided with a proper place in which to work, safe machines and tools with which to do the job and that he/she will be able to devote his/her energies to the work without undue danger to himself/herself or the environment.

Only under such circumstances can the association between employee and employer be mutually profitable and harmonious. It is our desire and intention to provide a safe workplace, safe equipment, proper materials, a safe environment, and to establish and insist upon safe methods and practices at all times.

There is a basic responsibility for all to make the safety and health of all human beings and preservation of our environment a part of their daily, hourly concern. This responsibility must be accepted by each one who conducts the affairs of the company, no matter in what capacity they may function. Employees are expected to use the safety equipment that is provided. Rules of conduct and rules of safety and health shall be observed. Safety equipment must not be destroyed or abused. Environmental issues including spills and releases must be addressed immediately.

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.

We consider the safety and health of our employees of primary importance and ask your full cooperation in making this policy effective.

Safety, Health, and Environmental Program Goals

The goal of our safety program is to insure safety, prevent illness, and protect the environment through a comprehensive ongoing safety, health, and environmental program. We will strive to achieve accident-free, illness-free, and environmentally safe work sites for all employees, clients, and the general public.

Streeter Associates, Inc. Safety, Health, and Environmental Program will be reviewed periodically to evaluate the effectiveness of the program.



STREETER ASSOCIATES, INCORPORATED EMPLOYEE GENERAL SAFETY AND HEALTH RULES

- 1. Whenever you are involved in an accident that results in personal injury or property damage, no matter how small, the accident must be reported to your supervisor. Get first-aid promptly.
- 2. Report any condition or practice you think might cause injury or damage to equipment immediately to your supervisor.
- 3. Do not operate any equipment which, in your opinion, is not in a safe condition. Report immediately the condition that you believe is unsafe to your supervisor.
- 4. All prescribed safety equipment and personal protective equipment must be used when required and must be maintained in good working condition.
- 5. Obey all safety rules, government regulations, signs, markings, and instructions. Be particularly familiar with the rules and regulations that apply directly to you in the area in which you work. If you don't know, ask your supervisor.
- 6. When lifting, use the approved lifting technique, i.e. bend your knees, grasp load firmly, keep load close to you, then raise the load keeping your back straight as possible. Always get help with heavy or awkward loads.
- 7. Don't horse play; avoid distracting others; be courteous to fellow workers.
- 8. Always use the right tools and equipment for the job. Use them safely and only when authorized. If you are not familiar with the safe way to use a particular tool or piece of equipment, ask your supervisor.
- 9. Good housekeeping should always be practiced. Return all tools, equipment, materials, etc. to their proper places when you are finished with them. Keep floors clean and passageways clear. Poor housekeeping wastes time, energy, and material, and often results in injury.
- 10. The use of drugs and/or intoxicating beverages is forbidden during work hours or on company property and is cause for immediate dismissal. Employees involved in an accident may be subjected to testing for the use of these substances.
- 11. Appropriate action will be taken for the following offenses:
 - a) Fighting no matter what the cause.
 - b) Insubordinate Conduct refusal to follow directions.
 - c) False Statement such as injury claims.
 - d) Other Inappropriate Behavior including, but not limited to, failure to obey safety rules.



- 12. Loose clothing and jewelry cannot be worn when operating machinery and equipment.
- 13. Proper work shoes shall be worn at all jobsites. Open toe shoes and sneakers will not be permitted to be worn at any jobsite. If you are observed wearing open toe shoes or sneakers, you will not be allowed to work until you return with proper footwear.
- 14. Do not handle chemicals unless you have been trained in the safe handling procedure.
- 15. Compliance with safety and health rules and regulations is a condition of employment.
- 16. Non-compliance of these rules, as well as, other Federal and/or State Laws or Regulations may be legal violations subject to civil and/or criminal penalties.
- 17. Fire extinguisher and first aid kits are located at all of our job sites.



COMPETENT PERSON ACCOUNTABILITY

All trained competent persons will be accountable for meeting or exceeding the safety policies and training procedures that have been set forth by Streeter Associates, Inc.

Safety goes hand in hand with efficient jobsite operations and cost control. Promoting safety and health is good management. Attention to safety is one of your primary responsibilities to your organization and your fellow workers.

You are expected to take an active interest in employee safety and health and to assist the company with safety and health activities.

By leading your workers to consider safety as a part of their normal work routine, you will win their loyal support and cooperation.

COMPETENT PERSONS TRAINING / SAFETY MEETINGS

All Streeter Associates, Inc. superintendents shall receive the "Competent Person Training" by attending bi-monthly safety meetings. Project managers, estimating staff, and management may also attend these meetings. This will reinforce the company commitment to health and safety.

This entire group will form our safety committee as the committee will depend on the knowledge, experience, and cooperation of all for its success.

The safety meeting agenda may include the following, but is not limited to this list.

- 1. Training on specific subjects using videos, slides, and handouts.
- 2. Review of accident reports and discussion of corrective actions
- 3. Discuss potential hazards and effective controls.
- 4. Reinforce the need for employee training
- 5. Make recommendations to management.
- 6. Review safety policy for effectiveness at least annually.
- 7. Review accident statistics and make recommendations.

Minutes will be taken at each meeting and kept on file.



RESPONSIBILITIES OF SUPERINTENDENTS AND FOREMAN

Streeter Associates, Inc. has a legal obligation to comply with our safety program and you may be held legally liable for injuries or fatalities that occur to your employees and/or members of the general public because you are a representative of management. It is in your interest and the company's to carefully follow the safety rules and procedures that have been adopted as our safety policy.

Not only does accident prevention reduce human suffering and loss, it is also good management. Safety goes hand in hand with efficient jobsite operations and cost control which are an important part of your responsibilities. It is your primary responsibility to our organization and to your fellow workers.

Safety rules and procedures that you shall follow:

- 1. Know the rules of safety that apply to the work you supervise. Make sure that all employees in your charge understand the safety rules that apply to them. Always take immediate action to correct safety rule violations. Unsafe acts or procedures cannot and should not be tolerated.
- 2. As a superintendent or foreman you are responsible for seeing that each employee is performing the assigned task and that the tasks are performed safely. Observation should be completed daily in the beginning and regularly thereafter. Don't allow bad habits to develop.
- 3. Take action to correct or control hazardous conditions within your work areas. If correction or control is beyond your control, report the unsafe condition verbally and in writing to the project manager. Eliminate unsafe conditions and prevent an accident.
- 4. Encourage workers to report unsafe conditions or procedures. Listen to your workers and don't take their safety complaints lightly. No job should proceed when a question of safety remains unanswered. Seek additional advice from your project manager when necessary.
- 5. Set a good example. Demonstrate safety in your own work habits and personal conduct. Do not appear as a hypocrite in the eyes of your employees. Always wear personal protective equipment in areas where equipment of this type is required.
- 6. Emphasize to your employees the proper safe procedures to follow and the use of any additional safeguards, such as personal protective equipment and machine guards.
- 7. Investigate and analyze every accident, however slight, that occurs to any of your employees. When causes of minor injuries are ignored, crippling accidents may later occur.



- 8. Become familiar with OSHA 29 CFR 1926, Construction Industry Regulations and comply with these regulations on all jobsites. (See handbook Voluntary Compliance with OSHA.)
- 9. Conduct regularly scheduled safety meetings at the job-site utilizing the weekly safety meeting outlines furnished by the Office.
- 10. Notify the office whenever OSHA personnel appear at your site.
- 11. Each supervisor has a responsibility to assure himself that employees under his supervision are at all times fit to perform their duties safely and are free from the influence of alcohol and illegal drugs by taking appropriate and consistent action whenever an employee demonstrated judgment or performance appear to be impaired due to the use of alcohol or illegal drugs during work hours or on company property in the course and scope of employment.

You can win the support and cooperation of your employees with your attention to their safety and by leading them to consider safety as a part of their normal work routine.



II.

Jobsite Analysis



INSPECTION POLICY

It is our policy to reduce and eliminate hazard exposures that can lead to employee injury and property damage. Self-inspection is one of the tools we will utilize to provide a safe workplace.

Superintendents or Foremen are required to make daily visual inspections of the work area and to test all equipment safety devices prior to the start of the work day. Corrective action must be provided immediately if any hazards exist or if any safety device is not functioning properly. If the equipment cannot be repaired, then it must be tagged out and removed from service.

Superintendents or Foremen may be required to complete a monthly inspection of the worksite using the "Safety Inspection Form" furnished by Streeter Associates, Inc. If any hazardous conditions are noted, corrective action must be taken. If the corrective action is beyond your authority or capability, keep all employees away from the hazardous condition until it is corrected. Superintendents are required to follow up on all reported hazards to make sure they have been eliminated.

Safety Inspection Forms will be turned into the office when completed.

Lack of appropriate inspections as well as falsification of inspection forms is a violation of company procedure and may be a civil and/or criminal violation of Federal and/or State laws or regulations.

Random inspections will be conducted by management to ensure that policy is being followed.



III.

Hazard Prevention and Control



HAZARD PREVENTION & CONTROL

All employees will participate in the prevention and control of hazards through the proper use of engineering controls, work practices, and personal protective equipment. All employees will also observe all safety regulations as set forth by Streeter Associates, Inc.

Personal protective equipment will be available from the Superintendent or Foreman and must be used. Failure to use personal protective equipment will result in disciplinary action and/or dismissal.

The Safety & Health Program will be the means by which all employees will be trained in the proper safety practices and informed of the safety regulations.

PREVENTATIVE CONTROLS

The Shop Foreman will be responsible for the proper preventative maintenance on all company owned equipment. He shall maintain all records and schedules for all equipment maintenance.

REPORTING OF HAZARDS

Employees are required to report all unsafe conditions or hazards to their Superintendent or Foreman immediately. Unsafe equipment should be tagged out with the appropriate tag out procedures and given to the Superintendent or Foreman for repair or return to the shop.

If unsafe conditions are not remedied immediately, every employee has the right to request a "Report of Hazard" form. The employee will complete the form and the Superintendent will turn it into the office. The employee will receive a copy from the main office with the corrective action noted.

Superintendents and Foremen may also use the "Report of Hazard" form to document unsafe conditions and their immediate remedies. The form is included on the following page, but is also included in Appendix A (Tab 18 of this Manual)



ACCIDENT INVESTIGATION POLICY

Accident investigation and analysis will be conducted as a means to prevent accidents. The purpose of an investigation is to produce information that will lead to corrective actions thereby reducing or eliminating the possibility of similar future accidents. The more complete the investigation, the easier it will be for the corrective action to be taken.

The focus of investigations is on <u>fact finding</u>, not fault finding. This is not to say that responsibility may not be fixed where personal failure has caused injury, or that such persons should be excused from the consequences of their actions. It does mean that the accident investigation is to be concerned with only the facts.

Superintendents or Foremen are required to make a documented report of <u>every</u> injury within 24 hours of the occurrence and call the Safety Director immediately. Reports are to be completed as soon as possible to avoid changes in physical conditions and witness reports that might alter the facts. These investigations are required by OSHA and the NYS Workers' Compensation Board, and may also be required for future legal problems.

All accidents will be reported on the "Supervisor's Report of Incident" form. The form is included in this section, but is also included in Appendix A (Tab 18 of this Manual).



ACCIDENT INVESTIGATION PROCEDURE

There are two basic types of accident causes: the unsafe act and the unsafe condition. <u>Every</u> accident has one or more causative factors that must be determined.

It is unacceptable to complete a Report of Incident stating that no unsafe act or condition existed. It is also unacceptable to use the term "carelessness" as a catch-all phrase. <u>If carelessness was the cause, then the report must indicate if it was caused by improper use of equipment or lack of training.</u>

The injured employee must be interviewed as soon as possible after the accident occurs. Witnesses must also be interviewed and their statement documented immediately. The scene of the occurrence must be inspected to determine the physical conditions at the time of the accident.

The report must be completed in full, signed by the investigating Superintendent and submitted, along with any other documentation, to the main office within 24 hours.

If Superintendent or Foreman completing the form did not witness the accident, he must state who he is interviewing and "employee states ..." for each statement made.

From this information, supervisors will seek to ascertain:

- 1. What took place just before the accident?
- 2. What caused the accident?
- 3. Facts that led up to and caused the accident so that corrective action can be taken.
- 4. Preserve the scene.

*There is an Incident Reporting form included in Appendix A (Tab 18 of this Manual).



EMERGENCY POLICY

All employees are required to evacuate any hazardous areas in an emergency situation. All employees will report to the Foreman or Superintendent immediately the emergency situation that exists.

All employees are required to respond immediately to all alarms and emergency signals by Streeter Associates, Inc., other contractors, and owners. In many cases, the alarm will be verbal.

All employees must acquaint themselves with emergency escape routes on a daily basis due to the fact that the construction process may change emergency routes.

Upon hearing any alarm, all employees are required to report to the job trailer for a head count.

Emergency phone numbers are posted beside the phone in the job trailer and should be called immediately as directed by the Superintendent or Foreman.

The Superintendent and Foreman are responsible for notifying all other employers on the jobsite.

Fire extinguishers are at all job sites and can be used only if the employee is not placing himself in danger by using it and is trained on how to use one.

Streeter Associates, Inc. does not have on-site emergency response teams and expressly excludes emergency response actions from all employees' job descriptions.

MEDICAL POLICY

Professional medical assistance will be available and in close proximity of all job sites. All job site must have the phone numbers to the nearest hospital or care facility posted. Advance contact will alert medical assistance of your existence and location.

Streeter Associates, Inc. employees <u>are not</u> expected to give medical assistance or to perform first aid activities on any other employee. The nearest professional medical assistance shall be called to assist injured employees. It is to be expressly understood that performing first aid activities <u>is not</u> included in any Streeter Associates, Inc. employee job description.

Any employee assisting an injured employee or performing first aid activities would fall under the "Good Samaritan" exception of the OSHA Blood borne Pathogen Standard.

*FIRST AID KITS ARE AVAILABLE ON ALL JOB SITES



LEAD AWARENSS POLICY

All employees will be given Lead Awareness Training. This will provide the knowledge needed to protect himself / herself and the environment from the hazards of lead. Employees will be trained on the OSHA requirements, health hazards, exposure assessment, medical surveillance, and recordkeeping.

ASBESTOS POLICY

It is the policy of Streeter Associates, Inc. <u>not</u> to handle any asbestos containing materials. If, in the normal course of work, an employee encounters suspect material (PACM or ACM) he or she is to follow the procedure below.

If you suspect ACM or PACM:

Stop all work in the immediate area so no suspect material is disturbed Report suspicions to

your supervisor

The supervisor will cordon off the suspect area and tag the area as a "Do Not Enter" area and contact the building owner

The Owner will provide documentation that the area does not contain ACM or the area will be abated by a qualified contractor.

All Class I, Class II, and Class III projects are to be handled by an asbestos abatement contractor. Class IV projects do not pertain to Streeter Associates, Inc. construction projects. The work classifications are as follows:

- **Class I** Removal of thermal system insulation and asbestos containing surfacing materials.
- **Class II** Removal of asbestos containing materials such as wallboard, floor tile and sheeting, roofing, siding shingles, mastic, etc.
- **Class III** Repair and maintenance operations where asbestos containing materials are likely to be disturbed (pipe insulation, surfacing materials).
- **Class IV** Maintenance & custodial activities during which employees contact asbestos containing materials or presumed asbestos containing materials.



OSHA states that <u>all building materials</u> used prior to 1980 are presumed to contain asbestos. All demolition work and repair & maintenance work needs to be evaluated prior to starting work. It is important to note that many building materials are <u>still</u> being manufactured with asbestos.

Some of the materials that may contain asbestos are:

Vinyl floor Tile/Mastic Fire Proofing Spackling Compound

Ceiling tile Plasterboard Mortar Cement

Gasket/Valve Packing

Roofing Materials/Mastic Insulation Pegboard Decorative Plaster/Coatings Siding/Transite



IV.

Safety and Health Training



GENERAL TRAINING POLICY

Employees never receive too much training and therefore our company relies on jobsite management to provide ongoing employee training.

Weekly safety & health training will be conducted on the jobsite every Monday morning along with the regular weekly job orientation meeting. This will be conducted by the Competent Persons on site.

Topics will be selected from the Streeter Associates toolbox binder. Each topic that is chosen will pertain to the current work being performed for more effective site specific training. One copy of <u>each</u> topic discussed will be signed by all attendees and returned to the main office <u>each week</u>. Whenever possible, copies of the discussion materials will be given to every employee to follow along during the training.

Supervisors will be required to attend Bi Monthly safety meeting to strengthen and refresh their safety education.

NEW EMPLOYEE SAFETY/HEALTH TRAINING POLICY

All new employees must be proficient with their knowledge of safety prior to starting work. Each employee must have an OSHA 10 or 30 hour card The employee packet will be reviewed with the employee. All forms must be signed by employee and the superintendent or foreman will be turn the forms into the main office.



EMPLOYEE SAFETY ORIENTATION ACKNOWLEDGEMENT

TRAINING CHECKLIST

- 1. Policy, Commitment, and Employee Participation, Program Goals, General Safety and Health Rules.
- 2. Hazard Prevention and Control, Preventative Controls, Reporting of Hazards, Hazard Form
- 3. Disciplinary Policy and Enforcement Procedures
- 4. Emergency Policy, Medical Policy, Lead Awareness Policy, Asbestos Awareness Policy, Confined Space Policy
 - 5. Accident Investigation policy
 - 6. Lockout/Tagout Procedure
 - 7. Proper Lifting Techniques
 - 8. Ground Fault Circuit Interrupter Program
 - 9 Fire Extinguisher Use and Safety
 - 10. Scaffold Safety
 - 11. Ladder Safety
 - 12. Welding and Burning Safety
 - 13. Compressed Gas Safety
 - 14. Slips, Trips, & Falls
 - 15. Fire Protection and Prevention

- 16. Eye and Face Protection
- 17. Extendable and Articulating Boom Platforms
- 18. Housekeeping
- 19. Hearing Protection
- 20. Electrical Safety
- 21. Job Safety Analysis

Issue appropriate personal protective equipment and/or inform employee where to obtain this equipment

Employee Acknowledgement

I acknowledge that the above information on the Lead in Construction Standard was furnished to me and that I understand this information. I understand that I am ultimately responsible for my own health & safety and I will abide by this program.

Signature

Date

Trainer Acknowledgement

I have completed the training for the Lead in Construction Standard and the above employee indicated that he/she understands the information.

Signature

Date



DISCIPLINARY POLICY AND ENFORCEMENT PROCEDURES

All employees are expected to comply with jobsite rules and regulations and to follow established operating procedures as set forth by Streeter Associates, Inc. Violations will not be tolerated. Superintendents and Foremen will be held accountable for the conduct of their employees. Superintendents and Foreman are required to take action when a violation is observed. Immediate action to control or eliminate the hazard is required.

In the event that a violation is observed, the following procedures have been established to place the employee on notice.

| <u>Notice</u> | Action |
|---------------|---|
| lst Offense | A verbal warning is given to the employee and a notation copy is placed in the office file. |
| 2nd Offense | A written warning is given to the employee and a copy is given to the union steward and also placed in the office file. |
| 3rd Offense | Same as 2nd offense, but a meeting is also held to determine if the employee should be suspended or terminated. |
| 4th Offense | Same as 2nd offense with immediate termination. |

An employee can be terminated at any time during the disciplinary procedure.



NOTICE OF DISCIPLINARY ACTION

| EMPLOYEE NAME: | DATE: |
|--|--|
| | UNION: |
| THIS IS YOUR (FIRST, SECOND, THIRD, FC OF OUR COMPANY SAFETY & HEALTH R | OURTH) WARNING THAT YOU WERE IN VIOLATION ULES OR PROCEDURES. |
| DATE OF VIOLATION: | TIME OF VIOLATION: |
| DESCRIPTION OF VIOLATION: | |
| | |
| | |
| | |
| THIS WARNING WILL BE HANDLED IN AC | CORDANCE WITH OUR DISCIPLINARY POLICY |
| AND ENFORCEMENT PROCEDURES. | |
| THIS WILL CERTIFY THAT THE UNDERSIG EMPLOYEE. | INED PROVIDED THIS WARNING TO THE NAMED |
| NAME: | |

SIGNATURE:_____ DATE: _____

| I ST OFFENSE: | COPIES TO OFFICE |
|--------------------------|---------------------------------------|
| 2 ND OFFENSE | COPIES TO EMPLOYEE, OFFICE, AND UNION |
| 3 rd OFFENSE: | COPIES TO EMPLOYEE, OFFICE, AND UNION |
| 4 [™] OFFENSE: | COPIES TO EMPLOYEE, OFFICE, AND UNION |



۷.

Specific Procedures and Policies



PURPOSE

LOCKOUT / TAGOUT PROCEEDURE

The purpose of the procedure is to prevent injury to Streeter Associates Inc's employees caused by the unexpected startup of machinery or release of stored energy (i.e., steam, mechanical, electrical, pressurized fluids, etc.) during repair, maintenance or service operations. To achieve this, Streeter Associates Inc has implemented this lock out/tag out policy. Streeter Associates Inc will use uniform lock out devices, which will be maintained by the Warehouse supervisor. All employees are hereby notified that lock out/tag out devices shall not be tampered with, destroyed, or altered.

SCOPE

This procedure shall apply to all personnel whose duties require the use, repair, maintenance or service of equipment or facilities where the unexpected start up or energization of the device or component could result in injury to employees.

RESPONSIBILITIES

The competent person will be responsible for implementation of the program.

The competent person will function as the Lockout/Tagout supervisor. He/she will be responsible for ensuring that the mechanics follow the lockout /tagout procedures.

Authorized employees will responsible for locking and/or tagging out machinery, equipment or facility systems for the purposes of performing repair, service or maintenance on that equipment, machine or facility system at any time when unexpected startup or release of hazardous energy is anticipated. Authorized employees are responsible for following all equipment specific lock out/tag out procedures. An authorized employee may be an affected employee when he/she is working in the area of, but not on, a locked or tagged out piece of equipment, machine or facility system.

Employees affected by the lock out/tag out of machines or equipment (i.e. operators, etc.) must be aware of the nature of lock out/tag out procedures, specifically that they should not attempt to start or use locked/tagged equipment, or bypass any lockout device.

TRAINING

All authorized employees will receive effective initial training and yearly update training as needed. This training will cover all aspects of lockout and tagout rules and procedures. All training documentation will be maintained according to the OSHA requirements.



Affected and other personnel will receive a lesser degree of training and yearly updates thereafter. This training will cover the limited aspects of lockout and tagout that these employees need. All training documentation will be maintained according to the OSHA requirements.

RETRAINING

When Streeter Associates Inc has reason to believe that an employee lacks the skill or understanding needed for safe work involving lock out/tag out, management shall ensure that such employee is retrained so that the prerequisite proficiency is regained. Retraining is required in at least the following situations:

- Where changes at the workstation present a hazard about which an employee has not been previously trained; or
- Where inadequacies in an affected employee's knowledge or skills indicate that the employee has not retained the requisite proficiency.

ENFORCEMENT

This lockout/tagout policy, like all safety policies, will be enforced in the same manner as other employee rules. The enforcement and disciplinary steps regarding safety infractions are detailed in the Streeter Associates Inc's safety policy. The supervisor will conduct periodic inspections to ensure that the policy is consistent and effectively adhered to.



EQUIPMENT TAGOUT PROCEDURE LOCKOUT/TAGOUT PROCEDURE

RESPONSIBILITIES

The company Safety Director or of equivalent responsibility will be responsible for implementation of the program.

The supervisor will function as the Lockout/Tagout Coordinator. He will be responsible for ensuring that the mechanics follow the lockout /tagout procedures.

PROCEDURE

The following is the sequence of the lockout or tagout procedure to be followed. Only when the energy sources are not lockable can a tag alone be used.

1. Shut down

- a) Notify all affected employees that a lockout or tagout sequence is in commencing, the reasons for the lockout and the expected time of completion. The authorized employee must be familiar with the types, magnitudes and origins of the energy sources involved. He/she must also have an understanding of the way the device or system operates and the hazards thereof.
- b) If the machine, equipment or system is operating, shut it down with the normal stopping procedure (stop button, speed control, valve, etc.). Allow machine or device to spool down, come to complete rest or cool off, if applicable.
- c) Locate and operate the appropriate energy isolating devices so that the equipment is disconnected from its energy source(s). Dissipate or restrain stored energy by blocking, bleeding down, chocking, etc.
- d) Apply lockout or tagout device to the applicable energy isolating devices. Apply only assigned locks and tags. No employee shall work on a machine or system while not locked out, each authorized employee involved is required to be protected by a lock or tag. Tags and locks shall indicate the authorized employee who applied it, the date it was applied and the duration of the job (if applicable).
- e) After applying locks and/or tags, conduct an area inspection to ensure that no employees are exposed to the hazardous energy. When the authorized employee has conducted the inspection and is satisfied that it is safe to do so, attempt to operate the machine. The authorized employee should also attempt to defeat the lockout or tagout. The machine or system shall remain in a zero mechanical state until each authorized employee removes his/her lock.



f) With the above conditions satisfied, the equipment/system may now be considered locked or tagged out of service and the authorized employees who have implemented the lockout may conduct the servicing, repair or maintenance required.

2. Restart

- a) After the servicing, maintenance or repair is complete and the machine or system is ready to be put back in service, the area around and in the machine or system must be inspected for debris, tools, parts or employees. This shall be done while the machine or system is still locked or tagged out. This inspection is to be performed by the authorized employee who applied the lockout.
- b) With the area clear of all non-essentials, tools, employees, etc., inform the affected employees that the lockout or tagout is to be removed. Remove the lockout or tagout device(s) from the energy isolating device(s).
- c) While observing the machine or system, move the energy isolating device(s) into the operational position, reenergizing the machine or system.
- d) With the machine or system energized, inspect for proper, safe operation. If applicable, run through a cycle or otherwise operate the equipment or system to ensure that it has been repaired or serviced properly and that it is safe to return to service.
- **NOTE:** Site Specific procedures will be added as needed.

GROUP LOCK AND TAGOUTS

When a device or system is to be locked or tagged out two or more people must follow group lockout procedures. The procedure is essentially the same as single person lockouts with a few deviations. Each authorized employee involved in the lockout must apply his or her own, personal lock to every energy source that is to be locked out. Employees cannot work on other employees' lockouts or tagouts. The group lockout and tagout must be run in such a manner so as to ensure that no locked out energy source can be reenergized without every authorized employee involved having to remove his/her lock.

During a group lockout or tagout a person in charge of the entire lockout is to be identified. This 'lockout/ tagout coordinator will be an involved authorized employee and be responsible for the safe implementation of the group lockout. Duties include:



- a) Ensuring each involved authorized employee is protected by his or her own lock.
- b) Ensuring that all employees involved are aware of and are safe during, lock removal.
- c) Conducting a pre-energizing inspection or coordinating with observers to ensure that no one is in a hazardous position or area during re-energization.

TRANSFER OF LOCKOUT OR TAGOUT

When a lockout or tagout has to be transferred from one shift to another or one worker to another, a specific policy must be followed to ensure that a machine or device does not become energized in an unsafe condition. The authorized employee who initiated the lockout retains full responsibility for it until, he/she removes his/her lock and another authorized employee's lock is applied. No employee is to remove a lock or tag for someone, or allow their tag or lock to be removed by someone else.

SUPERVISORY LOCK REMOVAL

At times, supervisors may need to remove a subordinate's lock or tag. These times may include, but are not limited to shift changes, employee absenteeism, and employee dismissal. This should be avoided whenever it is possible to do so; however, when it is not, the following steps must be rigidly adhered to minimize the risk of injury due to unintended startup or release of energy:

- a) The work area must be completely and carefully inspected by the supervisor who intends to remove the lock or tag in order to determine that the employee is not present.
- b) A reasonable effort must be made to contact the employee. This includes paging him/her, calling the employees home, plant wide announcements, etc.
- c) The machine or system must be inspected to determine if it is safe to unlock briefly. Also the state of repair must be ascertained, this information can be found in the LO/ TO log, the maintenance log or the work order.
- d) After the above requirements are met, the lock or tag can be removed and the supervisor's (or designee's) lock or tag applied. Supervisors must record this process on the appropriate form and keep it on record.

NOTE: The above process should not be conducted unnecessarily. If at all possible, the machine or system should remain locked out until the authorized employee who locked it returns.



EQUIPMENT

Employees will be provided to them, all the lockout/ tagout equipment required to safely conduct their work. Locks and tags issued to specific employees will be identifiable as that employee's and are to be used for lockout/ tagout purposes only. Employees shall not exchange or lend their locks or tags to anyone. Each lock will have only one key

TRAINING

Affected and other personnel will receive a lesser degree of training and yearly updates thereafter. This training will cover the limited aspects of lockout and tagout that these employees need, it too will be certified and records kept on attendance.

ENFORCEMENT

This lockout/ tagout policy, like all safety policies, will be enforced in the same manner as other employee rules. The enforcement and disciplinary steps regarding company rule infractions are detailed in the Streeter Safety manual. A summary of these steps are as follows:

Ist safety rule infraction: The supervisor issues a verbal warning and reviews the proper safety procedure with the offending employee.

2nd related safety rule infraction: The worker is issued a written warning by his or her supervisor, a copy of which is placed in the personnel file of the employee.

3rd related safety rule infraction: The worker can be suspended or dismissed.

NOTE: These steps shall apply only to those safety rules and policies that the employee has been trained or received information on.

SUMMARY

All equipment shall be tagged out and/or locked out to protect against accidental or inadvertent operation when such operation could cause injury. Removing a lock or tag without authorization shall be cause for immediate disciplinary action, which may include dismissal. The consequence of removing locks or tags could be a fatality.



<u>EQUIPMENT TAGOUT</u> - All employees are required to tagout any equipment in need of repair. The Foreman, Superintendent or affected employee will tagout the equipment by attaching a tag to the equipment. These tags will indicate that the equipment is not to be operated. The nature of the equipment problem shall be noted on the reverse side of the tag.

The equipment will then be returned to the shop for repair. Under no circumstances are these tags to be removed by unauthorized employees. After the equipment is repaired and tested, the shop superintendent will remove the tag and place the equipment back in service.

<u>LOCKOUT/TAGOUT</u> - This procedure establishes the minimum requirements for lockout of energy sources that could cause injury. All employees are required to follow this procedure while repairing or maintaining equipment.

- Notify all affected employees that a lockout is required.
- Shut down equipment through normal procedures.
- Dissipate stored energy such as that in capacitors, springs, elevated machine members, flywheels, etc. Restraint may also be a method of controlling the stored energy. Test equipment to be sure equipment will not operate. Return equipment to "Off" after testing.
- Lockout energy devices with locking devices and appropriate tags. The name of the employee installing the lock and the company name must be on the tag.
- NOW REPAIR OR MAINTENANCE OF EQUIPMENT MAY BEGIN.

After repair, be sure equipment is all clear. Remove locks and restraints and tags. Return equipment to normal service.



CRANE SAFETY PROCEDURES

PURPOSE

Many types of cranes are use at construction sites to move materials and complete several different required tasks for all building projects. It is Streeter Associates Inc's responsibility to see this process is done in a safe and productive manner. Streeter Associates Inc will ensure that only qualified / licensed and properly trained individuals are engaged in this operation. Management will ensure that all crane operations meet the OSHA, NYS DOL and NYC regulations (when applicable). Safe crane operations will provide protection for workers and the general public as well as preventing property damage.

RESPONSIBILITIES

It is management's responsibility to see that the proper oversight is provided on site and that superintendents implement Streeter Associates Inc's crane safety program. Qualified and competent personnel will be assigned these tasks and assure they are properly implemented. Management is responsible for compliance with applicable codes and standards and for ensuring that all operators are licensed/qualified (as required by NYS or NYC) or at a minimum meet OSHA Standard 1926. 1427.

GENERAL REQUIREMENTS

Fatalities and serious injuries can occur if cranes are not inspected and used properly. Many fatalities can occur when the crane boom, load line or load contacts power lines and shorts electricity to ground. Other incidents happen when workers are struck by the load, are caught inside the swing radius or fail to assemble/disassemble the crane properly. Due to the hazards mentioned the following precautions must be taken:

- Crane operators qualified by training or experience shall be allowed to operate equipment and machinery by one of the following methods:
- Certification by an accredited crane operator testing organization
- Qualification by an audited employer program
- Qualification by the U.S. military
- Licensing by a government entity
- Only qualified and experienced employees should be used as spotters and crane signalers
- A pre-lift meeting shall take place before any lift begins.
- Cranes are to be operated only by qualified and trained personnel.
- A designated competent person must inspect the crane and all crane controls before use. A competent person means 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.



- Be sure the crane is on a firm/stable surface and level.
- During assembly/disassembly do not unlock or remove pins unless sections are blocked and secure (stable).
- Fully extend outriggers and barricade accessible areas inside the crane's swing radius.
- Watch for overhead electric power lines and maintain at least a 20-foot safe working clearance from the lines.
- Inspect all rigging prior to use; do not wrap hoist lines around the load.
- Be sure to use the correct load chart for the crane's current configuration and setup, the load weight and lift path.
- Do not exceed the Working Load Limit (WLL) or load chart capacity while making lifts.
- Raise load a few inches, hold, verify capacity/balance, and test brake system before delivering load.
- Do not move loads over workers.
- Be sure to follow signals and manufacturer instructions while operating cranes.

GROUND CONDITIONS

The designated competent person will ensure that appropriate ground preparations have been provided before crane operations begin.

ASSEMBLY / DISASSEMBLY

- When assembling or disassembling equipment or attachments, affected workers will comply with all applicable manufacturer's prohibitions.
- All crane assembly and disassembly will be directed by the designated competent person and the designated qualified person. Qualified person means a person who, by possession of a recognized degree, certificate, or professional standing, or who by extensive knowledge, training and experience, successfully demonstrated the ability to solve/resolve problems relating to the subject matter, the work, or the project

POWER LINES

- The work zone shall be identified by demarcating boundaries such as flag and range limiting devices, or defining the work zone as 360 degrees around the equipment up to the maximum working radius. A hazard assessment must be used to determine if any part of the equipment could get within 20 feet of a power line that is up to 350 kV, or within 50 feet of a power line that is over 350 kV. see Table A
- For equipment with non-extensible booms or with articulating or extensible booms: The uppermost part of the equipment, with the boom at true vertical, must be more than 20 feet below the plane of the power line 350 kV or less, if unsure use Table A of this section to determine the minimum clearance distance below the plane of the power line.
- When working near power lines pushing over 1,000 kV, the minimum clearance distance will be established by the utility owner/operator or a registered professional engineer who is a qualified person with respect to electrical power transmission and distribution.



- The designated qualified person will verify and obtain documentation regarding the established safe distance.
- When traveling under or near power lines with no load, the boom, mast, and boom mast support system will be lowered sufficiently to meet the specified safe distance clearance requirements.

| Table A — Minimum Clearance Distances | | |
|---|--|--|
| Voltage (nominal, kV, alternating | Minimum clearance distance (feet) | |
| up to 50 | 10 | |
| over 50 to 200 | 15 | |
| over 200 to 350 | 20 | |
| over 350 to 500 | 25 | |
| over 500 to 750 | 35 | |
| over 750 to 1000 | 45 | |
| over 1,000 | (as established by the utility owner/operator or registered professional engineer who is a qualified person with respect to electrical power transmission and distribution). | |

INSPECTIONS

- Modified and/or repaired equipment will be inspected by the designated qualified person after the modifications and/or repairs have been completed, but before initial use.
- Upon completion of assembly, the equipment will be inspected by the designated qualified person to assure that it is configured in accordance with manufacturer's equipment criteria.
- Prior to each shift, the designated competent person will perform a visual inspection of the equipment that will be used.
- Once each month, all of the equipment that is in service will be inspected by the designated qualified person in accordance with the crane inspection criteria established at 29 CFR 1926 Subpart CC.
- Once each year, the designated qualified person will conduct a comprehensive inspection of all equipment that is in service in accordance with the crane inspection criteria established at 29 CFR 1926 Subpart CC



- Safety devices are required to be on all equipment and must be in proper working order before operations begin. If any of the devices are not in proper working order the equipment must be taken out of service and operations must not resume until the device is working properly again.
- Examples of safety devices may include: crane level indicator, boom stops, jib stops, foot pedal brake locks, horns, etc.
- When the equipment is used frequently enough that there is a reasonable possibility of damage or excessive wear, Streeter Associates Inc or its subcontractor's workers will stop using the equipment and take it out of service until it passes inspection by the designated qualified person based on the inspection criteria established at 29 CFR 1926 Subpart CC.
- Equipment that has been idle for three (3) months or more must pass inspection by the designated qualified person based on the inspection criteria established at 29 CFR 1926 Subpart CC before it can be used.

QUALIFICATIONS OF MAINTENANCE AND REPAIR EMPLOYEES

Maintenance, inspection and repair personnel are allowed to operate the equipment only under the supervision of the designated qualified person. Modifications or additions that may affect the capacity or safe operation of the equipment must not be made without written approval from the manufacturer or approval from a registered professional engineer.

WIRE ROPE INSPECTIONS

- Prior to each shift, the designated competent person will perform a visual inspection of any wire rope that is intended for use during the subsequent shift.
- Once each month, all of the wire rope that is in service will be inspected by the designated qualified person in accordance with the wire rope inspection criteria established at 29 CFR 1926 Subpart CC.
- Once each year, the designated qualified person will conduct comprehensive inspections of all wire rope that is in service in accordance with the wire rope inspection criteria established at 29 CFR 1926 Subpart CC.


WIRE ROPE SELECTION AND INSTALLATIONS

- The designated competent person will ensure that original equipment wire rope is selected and installed in accordance with the requirements established at 29 CFR 1926 Subpart CC.
- The designated competent person will ensure that selection of replacement wire rope is in accordance with the recommendations of the wire rope manufacturer, the equipment manufacturer, or the designated qualified person.

OPERATIONAL AIDS

All manufacturer procedures applicable to the operational functions of equipment, including its use with attachments, must be complied with. The operator shall have access to procedures applicable to the operation of the equipment. Procedures include rated capacities (load charts), recommended operating speeds, special hazard warnings, instructions and operator's manual. The designated competent person will ensure that the following operational aids, when applicable, are present on all equipment:

- Boom hoist limiting device;
- Luffing jib limiting devices;
- Boom angle or radius indicator;
- Jib angle indicator;
- Boom length indicator;
- Load weighing and similar devices.

All affected Streeter Associates Inc workers will comply with all manufacturer procedures applicable to the operational functions of equipment, including its use with attachments.

AUTHORITY TO STOP OPERATIONS

Whenever there is a concern about safety, the designated equipment operator has the authority to stop and refuse to handle loads until the designated competent person has determined that the safety concern has been resolved.

ORDINARY LIFT PLANNING

The designated leader shall ensure that the following pre-lift planning issues are addressed, as applicable, prior to the lift (a written plan beyond normal site work planning and control documents is not required, though may be desirable for more complex lifts). A Streeter Associates Inc Pre-Lift Checklist may be used as documentation that a pre-lift meeting and pre-lift plan is in place. Also, for construction lifts involving multiple mobile



cranes or temporarily installed overhead cranes, a written lift plan is required (refer 29CFR 1926.1432).

- Identify the item to be moved, its intrinsic characteristics (e.g., load integrity, loose materials, liquids), weight, dimensions, its center of gravity, its ability to support imposed lifting forces (both the load and any lift points), and whether it contains any hazardous or toxic materials.
- Validate the loads path and clearances.
- Identify lifting equipment and rigging to be used by type and rated capacity.
- Prepare rigging sketches, as necessary.
- Evaluate the work area for conditions impacting crane setup operations (e.g., weather, soil bearing capacity, underground utilities, clearances to power lines and other structures).
- Identify any special or site-specific operating procedures and special instructions.

CRITICAL LIFTS

Any time a critical lift takes place, all safety concerns must be addressed and controls in place to eliminate identified hazards. Permits, if required, must be completed and approved per customer procedures.

Critical Lift Determination

- A designated person shall classify each lift into one of the categories (ordinary, critical, personnel or pre- engineered production) prior to planning the lift. A lift shall be classified critical if any of the following conditions are met:
- If loss of control of the item being lifted would likely result in the declaration of an emergency as defined by the facility's emergency plan or construction site emergency plan.
- The load item is unique and, if damaged, would be irreplaceable or not repairable and is vital to a system, facility or project operation.
- The cost to replace or repair the load item, or the delay in operations of having the load item damaged would have a negative impact on facility, organizational, or budgets to the extent that it would affect program commitments.



- If mishandling or dropping of the load would cause any of the above noted consequences to nearby installations or facilities.
- For steel erection, a lift shall be designated as a critical lift if:
 - 1. The lift exceeds 75 percent of the rated capacity of the crane or derrick

OR

2. The lift requires the use of more than one crane or derrick. (§1926.751)

Further site-specific criteria may be developed to supplement those cited above and may include criteria imposed by site or project safety basis requirements as well as lifting loads which require exceptional care in handling because of size, weight, close-tolerance installation or high susceptibility to damage as well as lifts using multiple pieces of lifting equipment.

Though lifting personnel may meet the above criteria, personnel lifts shall not be considered critical lifts and shall be conducted in accordance with 29 CFR 1926.1431 and ASME B30.23.

CRITICAL LIFT REQUIREMENTS

Ensure that the requirements are met for ordinary lifts specified in each section of this standard for each particular equipment category. The operating organization shall appoint a Lift Supervisor for critical lifts. The Lift Supervisor shall be present at the lift site during the entire lifting operation. The Lift Supervisor shall:

Have the necessary knowledge and experience of the specific type of equipment and assigned lifting operations.

Understand the site rules and procedures addressing:

- Administrative requirements for lifting operations.
- Personnel assignments and responsibilities commensurate with job requirements.
- Selection of proper slings, rigging hardware, and lifting equipment.
- Recognition and control of hazardous or unsafe conditions.
- Job efficiency and safety.
- Critical-lift determination and documentation.

The Lift Supervisor shall ensure that a documented pre-job plan or procedure is prepared by qualified person(s) that defines the operation and includes the following:

Identify the item to be moved, its intrinsic characteristics (e.g., load integrity, loose materials, liquids), weight, dimensions, its center of gravity, its ability to support imposed lifting forces (both the load and any lift points), and whether it contains any hazardous or toxic materials.



Identification of operating equipment to be used by type and rated capacity (e.g., mobile crane, overhead crane, forklift). Rigging sketches and/or descriptions

Operating procedures and special instructions to operators including rigging precautions and safety measures to be followed as applicable.

All rigging equipment used in critical lifts (i.e., slings, below-the-hook lifting devices, and rigging hardware) shall be proof load tested in accordance with applicable ASME standards.

Experienced operators who have been trained and qualified to operate the specific equipment to be used shall be assigned to make the lift.

Only designated, qualified signalers shall give signals to the operator. However, the operator shall obey a STOP signal at all times, no matter who gives the signal.

The procedure and rigging sketches shall be reviewed and approved by a qualified person, the responsible manager (or designee) and the responsible oversight organization (such as the safety or engineering departments) before the lift is made. Subsequent revisions shall be approved per site specific procedures.

A pre-lift meeting involving participating personnel shall be conducted prior to making a critical lift. The critical lift plan/procedure shall be reviewed and questions shall be resolved.

Prior to executing a critical lift, a qualified person shall verify that the as-installed rigging matches the configuration in the approved lifting plan.

If required by the critical lift procedure, a practice lift shall be done before the critical lift. Conditions for a practice lift should closely simulate actual conditions involving: weight, rigging selection and configuration, load movement path, and other relevant factors. Practice lifts should be done by the same crew using the same lifting equipment that will be used in the lift.

Although individual plans are generally prepared for critical lifts, multi-use plans may be employed to accomplish recurrent critical lifts. For example, a multi-use plan may be used to lift an item or series of similar items that are handled repeatedly in the same manner.

However, if the lifting equipment or rigging must change to accomplish the lift, the critical lift plan must be revised and approved accordingly.



SIGNAL PERSON QUALIFICATIONS

- The designated competent person will obtain documentation from a third-party qualified evaluator showing that the signal person meets the qualification requirements before that signal person gives any signals to operators.
- The designated competent person will ensure that the signaler qualification documentation is always available at the jobsite. The documentation will specify each type of signaling the signal person is qualified to perform.
- Workers who do not meet the qualification requirements are not permitted to work as signal persons. This includes those who have signal person qualification credentials, but whose actions indicate that they are not performing signaling as required.

SIGNALING

A qualified signal person will be used in each of the following situations:

- When the point of operation is not in full view of the operator;
- When the view in the direction of travel is obstructed when the equipment is traveling; and/or
- When site-specific safety concerns are an issue because either the operator or the person handling the load determines that it is necessary

Signals to the operator will be given by standard hand signals, unless, the signals cannot be seen by the operator.

All directions given to the operator by the signal person will be given from the operator's direction perspective.

When standard hand signals can't be used safely, radios will be used for communication.

When radios are used, the operator and the signal person chosen for the project will be able to effectively communicate in the same language.

The devices used to transmit signals will be tested on site before beginning operations to ensure that the signal transmission is effective, clear and reliable.

Signal transmission will be performed through a dedicated channel, except where the crane is being operated on or adjacent to railroad tracks, and the actions of the equipment operator need to be coordinated with the movement of other equipment or trains on the same or adjacent tracks.



All operators will use a hands-free system to receive signals and communicate with the signal person.

Before beginning operations, the operator and signal person will contact one other and agree on the voice signals to will be used. Once the voice signals are agreed upon, further meetings are not needed unless: a worker is added or substituted, there is confusion about the voice signals, or a voice signal is to be changed.

Each voice signal will contain the following three elements, given in the following order.

- 1. Function (such as hoist, boom, etc.) direction;
- 2. Distance and/or speed; and
- 3. Function stop command.

If the ability to transmit signals is interrupted during operations, the designated equipment operator will safely stop all operations until the ability to transmit is re-established and proper signals can be given and understood.

If the designated equipment operator becomes aware of a safety problem and needs to communicate with the designated signal person, the designated equipment operator will safely stop all operations. Operations will not resume until both parties agree that the problem has been resolved.

Only the designated signal person may give signals to the operator, except in the case of an emergency.

Any worker may give the emergency stop signal if an emergency occurs. The designated equipment operator will safely stop all operations any time the emergency stop signal is given.

THE SIGNALER MUST ALWAYS:

- Be in clear view of the crane operator.
- Have a clear view of the load at all times.
- Keep people outside the load travel path.
- Ensure the load does not pass above people.
- Keep the crane away from power lines.
- Watch for other potential hazards during the lift.
- There should be only one designated signaler at a time. More than one will only confuse the operator.
- Wear a bright vest, different from any one else on site. This will help the operator identify who is currently in charge of signaling.



- Communication between the crane operator and the signal person shall be maintained continuously during all crane movements.
- If at any time communication is disrupted, the operator shall stop all crane movements until communication is restored.
- If there are any concerns regarding the signal or needs to communicate with the signal person, the operator shall stop all crane movement.
- Crane movement shall not resume until the operator and the signal person agree the issue has been resolved.
- If it is desired to give instructions other than those provided by the established signal system, the crane movements shall be stopped.

BASICS WHEN USING RADIO COMMANDS:

- Discuss the lift plan with the operator and agree on signals to be used.
- All directions shall be given from the operator's direction perspective.
- Use a secure frequency, free of distracting chatter.
- Use specific names not just titles. (i.e. "Jim" or "Tom Smith" as opposed to just "operator").
- Command names should be same as the hand signal names, (i.e. "Use whip line", "Boom down", "Boom Up", etc.).
- Each series of voice signals shall contain three elements stated in the following order:
 - Function and direction
 - Distance and/or speed
 - Function stop (i.e. "swing right 15 feet, 10 feet, 5 feet, 2 feet, swing stop)
- Once lift has begun, the signaler should never break communication with the operator. This is referred to as "constant communication".
- Never un-key the mic while the load is moving. The signaler should repeat the command to let the operator know everything is alright: (i.e. "slowly down, slow, slow...).
- If the signaler breaks communications (un-keys mic), the operator should stop immediately.

RIGGER QUALIFICATIONS

- The designated competent person will ensure that any worker being considered for designation as a qualified rigger has the knowledge, experience and expertise to serve in that capacity.
- The designated competent person will ensure that the documentation used to help determine that a worker is a designated qualified rigger is always available at the jobsite. The documentation will specify the types of rigging that the rigger is qualified to perform



• Workers who do not meet the qualification requirements are not permitted to work as qualified riggers, including those who have qualified rigger credentials, but whose actions indicate that they are not performing rigging operations as required.

FALL PROTECTION

The designated competent person will ensure that adequate fall prevention and/or protection is provided any time a worker is exposed to a fall of 6 feet or more to a lower level or to an object below.

WORK AREA CONTROL

The designated competent person will take measures to protect Streeter Associates Inc's workers from reasonably foreseeable risks of being struck by and/or pinched or crushed by the equipment's rotating superstructure.

All affected Streeter Associates Inc workers will be trained to recognize struck-by and pinch/crush hazard areas posed by the rotating superstructure.

The designated competent person will ensure that control lines, warning lines, railings or similar barriers are erected to mark the boundaries of the hazardous areas, unless it is infeasible to do so.

Where it is infeasible to erect barricades, the hazard area will be marked by a combination of warning signs (such as "Danger-Swing/Crush Zone") and high visibility markings on the equipment. The designated competent person will ensure that all affected Streeter Associates Inc workers are trained with regard to what these markings signify.

Before any worker goes to a location in the hazard area that is out of the view of the operator, the worker will ensure that the operator is informed that he is going to that location.

KEEPING CLEAR OF THE LOAD

Where available, affected workers will use hoisting routes that minimize their exposure to hoisted loads.

- While a suspended load is not moving, only the following Streeter Associates Inc workers will be allowed in the fall zone:
- Workers engaged in hooking, unhooking or guiding a load; and
- Workers engaged in the initial attachment of the load to a component or structure.



When affected Streeter Associates Inc workers must be in the fall zone the following will apply:

- The materials being hoisted will be rigged to prevent unintentional displacement;
- Hooks with self-closing latches or their equivalent will be used; and
- The rigging will be done only by the designated qualified rigger.
- Only workers receiving the load are allowed in the fall zone when the load is being landed.

During tilt up or tilt down operations, the following will apply:

- No worker may be directly under the load; and
- Only workers who are essential to the operation can be in the fall zone, but may never be directly under the load. A worker is considered to be an "essential worker" only when it is infeasible for that worker to perform the operation from outside the fall zone and he is physically guiding the load, closely monitoring and giving instructions regarding the loads movement, or must detach the load or initially attach the load to another component or structure.

FREE-FALL AND CONTROLLED LOAD LOWERING

Use of equipment in which the boom is designed to free fall is prohibited when:

- A worker is in the fall zone of the boom or load;
- The load or boom is directly over a power line or other hazardous area;
- The load is over a shaft in which workers are present;
- The load is over a cofferdam in which workers are present; or
- Lifting operations are taking place in a refinery or a tank farm.

Where the use of equipment with a boom that is designed to free fall is prohibited, the boom hoist will have a secondary mechanism or device designed to prevent the boom from falling in the event the primary system fails.

Hydraulic telescoping booms will have an integrally mounted holding device to prevent the boom from retracting in the event of hydraulic failure.

When a worker is directly under the load being hoisted, or when the load is directly over a power line or any other hazardous areas, controlled load lowering is required and free fall of the load line is prohibited.



HOISTING PERSONNEL - PERSONNEL PLATFORMS

Lifting equipment will not be used to hoist workers.

Personnel platforms will be used only as a last resort. All other avenues of elevated work should be explored and eliminated before working from a personnel platform.

The number of employees occupying the personnel platform shall not exceed the manufacturer's load rating specification.

Personnel platforms shall be used only for employees and their tools necessary to do their work, and shall not be used to hoist materials and/or equipment.

Materials and tools for use during a personnel lift shall be secured to prevent displacement.

Materials and tools for use during a personnel lift shall be evenly distributed within the confines of the platform while the platform is suspended.

Employees shall keep all parts of the body inside the platform during raising, lowering, and positioning. This provision does not apply to an occupant of the platform performing the duties of a signal person.

Before employees exit or enter a hoisted personnel platform that is not landed, the platform shall be secured to the structure where the work is to be performed, unless securing to the structure creates an unsafe situation.

Hoisting of employees shall be promptly discontinued upon indication of any dangerous weather conditions or other impending danger.

OVERHEAD JIB AND GANTRY CRANES

Overhead jib and gantry cranes will be installed per manufacturer's directions. Daily visual

inspections before use will include:

- All functional operating mechanisms
- Operation of limit switch and associated components
- Hoist braking system for proper operation
- Deterioration or leakage in lines, tanks, valves, drain pumps, and other parts of air or hydraulic systems
- Hooks with deformation or cracks
- Hoist chains
- Cracks in welds or base structure
- Overhead cranes will be inspected monthly and documented by a competent person.



- Complete annual inspections will be performed by a qualified crane company.
- Any overhead jib or gantry crane/hoist that does not pass inspection will be immediately tagged out of service and reported to the appropriate supervisor.
- Repairs will be made by a qualified person.
- Before performing any maintenance or electrical maintenance on the equipment, deenergize the main switch supplying power to the equipment. Follow all pertaining lockout tagout procedures.
- Hoist operators shall read the operation manuals and head all instruction and warning labels. They will be required to be familiar with the hoist and hoist controls before being authorized to operate the hoist or lifting system.

TRAINING

The employer must train each operator and crew member assigned to work with the equipment on all of the following:

- Procedures to be followed in the event of electrical contact with a power line.
- Information regarding the danger of electrocution from the operator simultaneously touching the equipment and the ground.
- The importance to the operator's safety of remaining inside the cab except where there is an imminent danger of fire, explosion, or other emergency that necessitates leaving the cab.
- The safest means of evacuating from equipment that may be energized.
- The danger of the potentially energized zone around the equipment (step potential).
- The need for crew in the area to avoid approaching or touching the equipment and the load.
- Safe clearance distance from power lines.
- Power lines are presumed to be energized unless the utility owner/operator confirms that the power line has been and continues to be de-energized and visibly grounded at the worksite.
- (Power lines are presumed to be un-insulated unless the utility owner/operator or a registered engineer who is a qualified person with respect to electrical power transmission and distribution confirms that a line is insulated.
- The limitations of an insulating link/device, proximity alarm, and range control (and similar) device, if used.
- The procedures to be followed to properly ground equipment and the limitations of grounding.
- Employees working as dedicated spotters must be trained to enable them to effectively perform their task



- Employees who may be exposed to fall hazards while on, or hoisted by equipment under this section.
- Signal persons. Streeter Associates Inc will train each employee who will be assigned to work as a signal-persons who does not meet the requirements of Sec. 1926.1428(c) in the areas addressed in that paragraph
- Competent persons and qualified persons will be trained regarding the requirements of this subpart applicable to their respective roles.
- Each employee who works with the equipment will be trained to keep clear of holes, and crush/pinch points and the hazards pertaining to those tasks.
- Each operator and each additional employee authorized to start/energize equipment or operate equipment controls (such as maintenance and repair employees), will be trained in the tag-out and start-up procedures.

TRAINING ADMINISTRATION

Streeter Associates Inc's management will evaluate each employee required to be trained under this subpart to confirm that the employee understands the information provided in the training.

Refresher training in relevant topics will be provided for each employee when, based on the conduct of the employee or an evaluation of the employee's knowledge, there is an indication that retraining is necessary.

Whenever training is required under subpart CC, the training will be provided at no cost to the employee.





APPENDIX A TO SUBPART CC OF PART 1926—STANDARD HAND SIGNALS





LOWER THE BOOM AND RAISE THE LOAD – With arm extended horizontally to the side and thumb pointing down, fingers open and close while load movement is desired.



MOVE SLOWLY – A hand is placed in front of the hand that is giving the action signal.



USE AUXILIARY HOIST (whipline) – With arm bent at elbow and forearm vertical, elbow is tapped with other hand. Then regular signal is used to indicate desired action.



CRAWLER CRANE TRAVEL, BOTH TRACKS – Rotate fists around each other in front of body; direction of rotation away from body indicates travel forward; rotation towards body indicates travel backward.



TROLLEY TRAVEL – With palm up, fingers closed and thumb pointing in direction of motion, hand is jerked horizontally in direction trolley is to travel.



USE MAIN HOIST – A hand taps on top of the head. Then regular signal is given to indicate desired action.



CRAWLER CRANE TRAVEL, ONE TRACK – Indicate track to be locked by raising fist on that side. Rotate other fist in front of body in direction that other track is to travel.





FORKLIFT SAFETY POLICY

PURPOSE

The purpose of this program is to establish procedures for the safe operation of power industrial trucks at Streeter Associates Inc.

This program additionally supports compliance with the Occupational Safety and Health Administration Powered Industrial Truck Standard, as found in 29 CFR 1910.178. This program applies to all Streeter Associates Inc employees, permanent or temporary, who are required to operate material-handling equipment, including forklifts, reach trucks, order pickers and powered pallet jacks.

DEFINITIONS

- Authorized Operator: An employee who has satisfactorily completed both classroom and operation training on material-handling equipment at the company's facilities.
- Load Center: The horizontal distance from the edge of the load (or the vertical face of the forks or other attachment) to the load's center of gravity.
- *Rated Capacity:* The maximum weight that the powered industrial truck is designed to lift, as determined by the manufacturer.

RESPONSIBILITIES

Operators are responsible for the following:

- Operating all powered industrial trucks in a safe manner consistent with safe rules of operation.
- Inspecting the powered industrial trucks before the beginning of each work shift and completing the appropriate inspection forms.
- Reporting all equipment malfunctions and/or maintenance needs to their supervisors immediately. Park lift in safe place, remove key, tag or note problem.

TRAINING

Training shall consist of a combination of formal instruction (e.g., lecture, discussion, video tape, written material), practical training (demonstrations performed by the trainer and practical exercises performed by the trainee), and evaluation of the operator's performance in the workplace. Someone who is authorized, qualified and determined to be competent shall conduct the training.



TRAINING PROGRAM TOPICS

Training shall include providing information on the following topics:

- Operating instructions, warnings, and precautions for the types of truck the operator will be authorized to operate;
- Differences between the truck and the automobile;
- Truck controls and instrumentation: where they are located, what they do, and how they work;
- Engine or motor operation;
- Steering and maneuvering;
- Visibility (including restrictions due to loading);
- Fork and attachment adaptation, operation, and use limitations;
- Vehicle capacity and stability;
- Any vehicle inspection and maintenance that the operator will be required to perform;
- Refueling and/or charging and recharging of batteries;
- Operating limitations;
- Any other operating instructions, warnings, or precautions listed in the operator's manual for the types of vehicle that the employee is being trained to operate.
- Workplace-related topics;
- Surface conditions where the vehicle will be operated;
- Composition of loads to be carried and load stability;
- Load manipulation, stacking, and unstacking;
- Pedestrian traffic in areas where the vehicle will be operated;
- Narrow aisles and other restricted places where the vehicle will be operated;
- Hazardous (classified) locations where the vehicle will be operated;
- Ramps and other sloped surfaces that could affect the vehicle's stability;
- Closed environments and other areas where insufficient ventilation or poor vehicle maintenance could cause a buildup of carbon monoxide or diesel exhaust; and
- Other unique or potentially hazardous environmental conditions in the workplace that could affect safe operation.

REFRESHER TRAINING

Refresher training, including an evaluation of the effectiveness of that training, shall be conducted to ensure that the operator has the knowledge and skills needed to operate the powered industrial truck safely.



Refresher training will be conducted when:

- The operator has been observed to operate the vehicle in an unsafe manner; The operator has been involved in an accident or near-miss incident;
- The operator has received an evaluation that reveals that the operator is not operating the truck safely;
- The operator is assigned to drive a different type of truck; or
- A condition in the workplace changes in a manner that could affect safe operation of the truck.

An evaluation of each powered industrial truck operator's performance shall be conducted at least once every three years and re-certified. Employee training records will be maintained at Streeter Associates Inc's office.

PROGRAM ACTIVITIES

Equipment Inspection and Maintenance

- Each powered industrial truck will be inspected before each shift begins. If the powered industrial truck will not be used that shift, inspection is not needed.
- A file will be maintained that lists the shift inspections of equipment.
- A maintenance log will be kept that identifies repair needs and corrective actions taken for each powered industrial truck. This log will be kept at the company headquarters.
- If repairs are needed on a powered industrial truck such that it cannot be safely operated, it will be taken out of service until the repairs have been made.
- After repairs have been completed, the powered industrial truck will be given a performance test to ensure that the equipment is safe to operate.
- Powered industrial trucks will be kept in clean condition, free of dirt, excess oil and grease.

Changing and Charging Batteries

- Equipment will be provided to safely flush and neutralize spilled battery acid and electrolyte.
- Smoking will be prohibited in all battery-charging areas.
- Eyewash equipment will be maintained in all charging areas.
- Precautions will be taken to prevent open flames, sparks and electric arcs in charging areas.
- Employees who change and service batteries and handle corrosive liquids will wear the proper Personal Protective Equipment (PPE).



SAFE WORK PRACTICES

General Safe Work Practices

- Only authorized, trained personnel shall operate lift trucks.
- Before start of shift, a visual inspection must be conducted. Employees shall not operate an unsafe forklift at any time.
- Fill fuel tanks out of doors while engine is off.
- Operators shall drive with both hands on the steering wheel. Horseplay is prohibited. Do not drive with wet or greasy hands.
- No person shall ride as a passenger on a forklift or on the load being carried.
- A forklift will not be used to elevate a platform or pallet with persons on it, except work platforms especially designed for this purpose. Work platforms must have standard guard rails, and must be securely fastened to the forks.
- No person shall stand or walk under elevated forks.
- Operators should avoid making jerky starts, quick turns, or sudden stops. The operator will not use reverse as a brake.
- Slow down on wet and slippery surfaces and at cross aisles or locations where vision is obstructed.
- Operators entering a building or nearing a blind corner shall make their approach at reduced speed. Sound horn and proceed carefully.
- Operators shall give pedestrians the right-of-way at all times.
- Operators shall not drive toward any person who is in front of a fixed object or wall.
- Operators shall not overtake and pass another forklift traveling in the same direction, at intersections, blind spots, or hazardous locations.
- Operators should not put their fingers, arms, or legs between the uprights of the mast, or beyond the contour of the forklift.
- Forks should always be placed under the load as far as possible. Do not lift a load with one fork.
- No load should be moved unless it is absolutely safe and secure.
- Use extra care when handling long lengths of bar stock, pipe, or other materials.
- Avoid sharp or fast end-swing.
- Compressed gas cylinders shall be moved only in special pallets designed for this purpose.
- When unloading trucks or trailers, the brakes on the vehicle will be set (locked) and the wheels chocked.
- Forklifts must be safely parked when not in use. The controls shall be neutralized, power shut off, brakes set, key removed, and the forks left in a down position flat on the surface, and not obstructing walkways or aisles.
- A forklift shall not be left on an incline unless it is safely parked and the wheels blocked.
- Only stable and safely arranged loads will be handled.
- Only loads within the rated capacity of the powered industrial truck will be handled.



Traveling

- Under all travel conditions, a powered industrial truck will be operated at speeds that will permit it to be brought to a stop in as safe manner.
- Three truck lengths will be maintained between powered industrial trucks in operation.
- The powered industrial truck will be kept under control at all times.
- When vision is obscured, the operator will slow down and sound the horn.
- If the load blocks the operator's view, the powered industrial truck will be driven in the direction that provides the best visibility.
- The powered industrial truck will cross railroad tracks at a diagonal.
- The powered industrial truck will be parked 8 feet or further from the center line of the railroad tracks.
- The operator will keep a clear view of the path of travel.
- The loaded powered industrial truck will be driven with the load upgrade when driving on ascending or descending grades greater than 10%.
- Dock boards and bridge plates will be properly secured before they are driven over.
- When the forklift is not carrying a load, the operator shall travel with the forks as low as possible (maximum of 6 inches on paved surfaces). When carrying a load, it should be carried as low as possible (consistent with safe operation, 2 to 6 inches above the surface.)
- The forks should not be operated while the forklift is traveling.
- On a downgrade, the load shall be last, and the forks raised only enough to clear the surface.
- On an upgrade, the load shall be first, and the forks raised only enough to clear the surface.



TOOL SAFETY POLICY

COMPANY POLICY

Streeter Associates Inc. is dedicated to the protection of its employees from occupational injuries and illnesses. Streeter Associates Inc. is responsible for providing a safe working environment, and the employees have and assume the responsibility of working safely.

The objective of this program is to supplement the safety policy by providing specific standards regarding Tool Safety, and to ensure that each employee is adequately trained and fully aware of safety procedures associated with tools

Elimination of injuries and illnesses improves employee morale, improves customer service, improves product quality, and reduces Workers' Compensation costs. Tool Safety serves as a tool to increase employee protection, and to reduce jobsite hazards.

Streeter Associates Inc. requires that employees be trained in the handling and operation of tools, and the daily inspection of tools to aid in the prevention of occupational injuries and illnesses.

Supervisor will conduct routine safety inspections of jobsites to ensure compliance with this program. Supervisors have the authority to enforce the Tool Safety Program in accordance to any and all Streeter Associates Inc. safety rules and applicable OSHA regulations.

Employees are required to comply with the guidelines set forth, and to comply with the instruction of their immediate supervisor. In the event an unsafe condition arises in the absence of the <u>supervisor</u>, employees shall alert the lead person on the jobsite immediately. Employees shall alert co-workers of any unsafe conditions that arise.

Any Streeter Associates Inc. employee who disobeys and/or disregards the guidelines set forth in this program or the company's safety program shall be subject to disciplinary action.

TOOL CONDITION

- Streeter Associates Inc. furnished tools and tools furnished by Streeter Associates Inc. employees shall be issued and maintained in a safe condition.
- Hand and power tools having jaws wrenches, adjustable and socket, shall not be used when jaws are sprung to the point that slippage occurs.
- Impact tools shall be kept free of mushroomed heads.



- Hand tools having wooden handles shall be kept free of splinters or cracks. Handles shall be kept tight in the tool.
- Tools shall be inspected before being issued, before use, and periodically, for defects and damage.
- Tool repair shall be performed only by qualified and authorized personnel.

POWER TOOLS

- Electric power operated tools shall either be of the approved double-insulated type or grounded.
- The use of electric cords for hoisting or lowering tools shall not be permitted.
- Pneumatic power tools shall be secured to the hose or whip to prevent the tool from becoming disconnected.
- Safety clips or retainers shall be securely installed and maintained on pneumatic impact tools to prevent attachments from being expelled.
- Compressed air shall not be used for cleaning purposes.
- The manufacturer's safe operating pressure for hoses, pipes, valves, filters, and other fittings shall not be exceeded.
- Hoses shall not be used for lowering or hoisting tools.
- Power tools that release fluid shall be equipped with automatic or visible manual safety devices to prevent accidental trigger release. Safety devices shall be in place to reduce pressure in case of hose failure.
- All power tools requiring electricity to operate will be used in conjunction with GFCI protection.

FUEL POWERED TOOLS

• All fuel-powered tools shall be stopped during refueling and maintenance.



• Fuel-powered tools, when used in confined spaces, the requirements for concentrations of toxic gases and use of personal protective equipment shall be followed in compliance with Streeter Associates Inc., and OSHA guidelines.

HYDRAULIC POWER TOOLS.

- Fluid used in hydraulic powered tools shall be fire-resistant.
- Manufacturer's safe operating pressures for hoses, valves, pipes, filters, and other fittings shall not be exceeded.

POWDER-ACUATED TOOLS

- Only trained and card-carrying Streeter Associates Inc. employees are allowed to operate a powder-actuated tool. Each trained employee must have a valid card.
- Tools must be tested each day before loading to ensure safety devices are working correctly. Testing method shall be in accordance with the manufacturer's recommended procedure.
- Any tool found to be defective shall be immediately tagged and removed from service until repaired.
- Tools shall not be loaded until just prior to firing time. Tools shall never be pointed at employees, either loaded or unloaded. Keep hands clear of the open barrel end.
- Loaded tools shall not be left unattended.
- Do not drive fasteners into hard or brittle materials.
- Do not drive into easily penetrated materials unless backed by a substance that will prevent the pin or fastener from passing completely through and creating a flying object hazard on the other side
- Do not drive fasteners into a spalled area caused by an unsatisfactory fastening.
- Do not use tools in an explosive or flammable atmosphere.



GUARDING

- Power operated tools equipped with guards shall not be removed while in use. Tools shall be used with the manufacturer recommended guard, shield or attachment.
- Tool hazards including; belts, gears, shafts, pulleys, sprockets, spindles, drums, fly wheels, chains, or other reciprocating, rotating or moving parts of equipment shall be guarded if the parts create a hazard exposure of contact by employees.
- Tool guarding methods include barrier guard, two-hand tripping devices, and electronic safety devices. These methods shall be used to protect operators and other employees from hazards created by point of operation, ingoing nip points, rotating parts, flying chips and sparks.
- Hand tools used for placing and removing material shall permit handling of material without operator exposure of placing a hand in the hazard zone. These tools shall be used as supplement protection and not in lieu of other required guarding.

PERSONAL PROTECTIVE EQUIPMENT

• Streeter Associates Inc. employees using hand and power tools and exposed to the hazard of falling, flying, abrasive, and splashing objects, or exposed to harmful dusts, fumes, mists, vapors, or gases shall use the personal protective equipment issued to them as protection from the hazard.

SWITCHES

• All hand-held powered tools equipped with a positive "on-off" control, a momentary contact "on-off" control and a lock-on control, or a constant pressure switch shall not be modified by any Streeter Associates Inc. employee or subcontractor employee.

TRAINING

- Streeter Associates' employees shall receive training on each tool prior to use of the tool on the jobsite.
- Employees shall demonstrate the use of each tool while supervised by their immediate supervisor.



This program is intended to provide the maximum protection for employees of Streeter Associates Inc.

• Upon completion of tool training, Streeter Associates Inc. shall certify in writing that each employee has received and understands requirements of tool safety. Certification shall include the employee's name, date of training, and subject of certification.

CONCLUSION

All employees of Streeter Associates Inc. are required to comply with the rules set forth in this written program.

GROUND FAULT CIRCUIT INTERRUPTER (GFCI) PROGRAM

Streeter Associates, Inc. has determined that a Ground Fault Circuit Interrupter Program is the preferred method of electrical protection and this program will replace the Assured Equipment & Cord Grounding Program.

Ground fault circuit interrupter devices can be obtained from the shop. These devices will be used on all electrical cords and equipment. The only exception will be jobsites that have the ground fault as an integral part of the temporary electric.

When plugging into an owner's permanent electric, ground fault circuit interrupters must be used even if the owner has ground fault as part of their permanent electric.

Weather related tripping of GFCI's can be addressed by checking for continuity, documenting your findings and actions and then re-instating GFCI's when the weather permits.

Periodic inspection of the GFCI's must be performed on site.



PROPER LIFTING TECHNIQUES

GENERAL

Protect Yourself

* Use the proper personal protective equipment (gloves, eye protection, hard hat, etc.)

Size up the Load

- * Tip it to see if you can carry it comfortably
- * Get help if it is too big or too heavy
- * Check for nails, sharp edges, etc.

<u>Lift it Right</u>

- * Make sure your footing is solid
- * Keep your back straight
- * Center your body over your feet
- * Get a good grasp & pull the load toward you
- * Lift with your legs, not your back
- * Don't twist your back, move your feet to turn

TOUGH LIFTING JOBS

Oversized Loads

- * Ask for help, don't attempt to carry it alone
- * Work as a team. Lift, walk, & lower together
- * Let one person direct the lift

<u>High Loads</u>

- * Use a ladder to reach loads that are above your shoulders
- * Get as close to the load as you can
- * Slide the load toward you
- * Do all the work with your arms and legs, not your back

Low Loads

- * Bend your knees, pull the load toward you
- * Try to support the load on one knee before you lift
- * Use your legs to power lift the load

CARRYING TIPS

- * Is your footing firm?
- * Is there enough clearance to keep hands safe?
- * Check your route for hazards
- * Be extra careful at platforms, ramps, & stairs
- * Carry long loads on your shoulder with the front end high
- * Make sure the next person has a firm grip before letting go of the load
- * When sharing the load, carry the load on the same shoulder, walk in step, work as a team



FIRE EXTINGUISHER USE & SAFETY

Hold the extinguishers upright and pull the pin ring, snapping the plastic seal.

Stand back from the fire the minimum distance specified on the extinguisher nameplate and aim at the base of the fire.

Keeping the extinguisher upright, squeeze the handle together and sweep from side to side. Move closer as the fire is extinguished, but not close enough to scatter the burning material.

When the fire is out, watch for re-ignition.

Evacuate and ventilate the area immediately after use. The fumes and smoke from any fire may be hazardous and can be deadly.

Fire extinguishers will be inspected monthly and marked on the tag by the onsite competent person. Fire extinguishers will also be inspected annually by a certified fire extinguisher inspector.

SCAFFOLD POLICY

POLICY

It is the policy of Streeter Associates Inc. that all employees and subcontractors erect, use, maintain, and disassemble all types of scaffolding in a safe manner while following established guidelines. This will be accomplished through the use of competent and trained employees working with well-maintained equipment that is inspected on a regular basis.

A scaffold is defined as any temporary elevated platform constructed of wood, metal, or a combination and its supporting structure used in construction or maintenance as an employee work platform and/or staging area for materials.

GENERAL REQUIREMENTS

- Designed to support at least 4 times the anticipated weight of workers and materials.
- Suspension scaffolds designed for a working load of 500 pounds should utilize no more than 2 workers at a time. Suspension scaffolds designed for a working load of 700 pounds should have no more than 3 workers at a time.
- Each platform on all working levels of scaffolds shall be fully planked or decked between the front uprights and the guardrail supports such that the space between adjacent units and the space between the platform and the uprights is no more than I inch (2.5 cm) wide.
- Safe and convenient means of access to the working platform level must be provided. This may be a portable or fixed ladder, a ramp or runway, or a stairway.
- Footings or anchorage must be level, sound, rigid, and capable of carrying the maximum intended load without settling or displacement.
- Brace poles, legs or uprights to prevent swaying and displacement.
- Unstable objects such as barrels, boxes, loose bricks, or concrete blocks are not to be used to support scaffolds or planks.
- No scaffold shall be erected, moved, dismantled, or altered except under the supervision of competent personnel.
- The use of shore or lean-to scaffold is prohibited.



- When work is being done below a scaffold, overhead protection must be provided no more than feet above the working platform. It must be made of planking or other strong material.
- Any scaffold or component of a scaffold that is weakened or damaged must be replaced or repaired immediately.
- Slippery conditions on scaffolds must be eliminated as soon as they occur.
- All load carrying timber member of scaffolds shall be a minimum of 1500 fiber (stressgrade) construction grade lumber.
- Wire, synthetic, or fiber rope should be capable of supporting at least 6 times the rated load and should be inspected before each use.
- Materials shall not be stored on scaffolds in excess of supplies needed for the current work shift.
- When erecting, moving, altering, or dismantling a scaffold, the competent person will ensure all employees are working in a safe manner including, but not limited to, utilizing proper fall protection, using all equipment in the way it was intended, handling materials in a safe fashion, etc.
- Refer to OSHA Scaffold standard for specific requirements for scaffold used.

TRAINING REQUIREMENTS

All employees who perform work on a scaffold will be trained by a person qualified (Competent Person) in the subject matter to recognize the hazards associated with the type of scaffolding being used. Training will also cover procedures to control or minimize those hazards. All training will be documented as required. Training shall include the seriousness of scaffold hazards such as:

- Falls
- Safe Access vs. Unsafe Access
- Falling Objects
- Electrocution
- Structure Collapse

RETRAINING

When Streeter Associates Inc. management has reason to believe that an employee lacks the skill or understanding needed for safe work involving the erection, use, or dismantling of



scaffolds, management/the Competent Person shall retrain the employee so that the prerequisite proficiency is regained. Retraining is required in at least the following situations:

- 1. Where changes at the worksite present a hazard about which an employee has not been previously trained; or
- 2. Where changes in the types of scaffolds, fall protection, falling object protection, or other equipment present a hazard about which an employee has not been previously trained; or
- 3. Where inadequacies in an affected employee's work involving scaffolds indicate that the employee has not retained the requisite proficiency.

COMPETENT PERSON

Scaffolds will be erected, moved, dismantled, or altered only under the supervision and direction of a qualified competent person. Such activities shall be performed only by experienced and trained employees selected for such work by the competent person.

Competent person means 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 the authorization to take corrective measures to eliminate them.

INSPECTIONS

All scaffolds will be inspected by a Competent Person prior to and during their erection. Daily inspections of the scaffold and its components will be made by the Competent Person prior to any employee accessing the scaffold to perform work and an inspection tag will be installed. Special inspections will be made by the Competent Person when circumstances warrant such as:

- High Winds
- Freeze/Thaw Conditions
- Heavy Rains
- Snow/Sleet
- Structure Modifications

FALLING OBJECT PROTECTION

To protect employees working on or below a scaffold from falling hand tools, debris, and other small objects, the competent person will ensure toe boards, screens, guardrail systems, debris nets, catch platforms, canopy structures, or barricades are installed as per regulatory requirements and according to the scaffold design. In addition, employees must wear hard hats at all times.



AERIAL LIFTS

Aerial lifts include the following types of vehicle-mounted aerial devices used to elevate personnel to job sites above the ground: extensible boom platforms, aerial ladders, articulating boom platforms, and vertical towers.

It is Streeter Associates Inc. policy that all aerial lifts must comply with the specific OSHA requirements for each type of aerial lift. Manufacturer recommendations will be adhered to at all times.

DISCIPLINARY POLICY/ENFORCEMENT

All Streeter Associates employees who have been trained in the proper use of scaffolds are expected to follow safe work practices and behave in a safe manner when working on or around a scaffold of any type. Streeter Associates Inc. makes safety a top priority, and as such, management shall follow the company disciplinary policy when an employee is observed violating any safety rule.

SCAFFOLD PROCEEDURES

- All scaffolding must be erected under the supervision of a Competent Person. No modifications will be allowed without direction from the competent person.
- All scaffolding must be erected level and on a firm base.
- Scaffolds that are three times or more higher than the smallest base dimension shall be secured to the building or structure at the second lift and every other lift thereafter. Running scaffold shall also be secured every 30 feet horizontally at the same height intervals.
- All working platforms must be equipped with standard rigidly secured handrails at 42" +or-3", midrails must be between the top edge of the guardrail system and the scaffold platform, and toeboards with at least with a 2x4", and be completely decked with scaffold plank.
- Any working platform higher than 10 feet must have handrails, midrails, and toeboards. This does not apply to baker scaffold. (small platform scaffold)
- No one shall ride a rolling scaffold while it is being moved. No one shall rock or otherwise cause a scaffold to move while on it. All tools and materials must be removed or secured before moving.
- Scaffold handrails, midrails, or brace members shall not be climbed. Always use ladders for access, unless a stair tower or ladder integral to the scaffold is provided.



- Scaffolds under which personnel are required to pass, shall be provided with 1/2 inch mesh #18 gauge wire screen between the toe board and midrail. The area may also be barricaded around the scaffold.
- Never exceed safe workloads. Materials must be safely distributed and not stacked higher than 24 inches on a scaffold deck.
- Never rig from scaffold handrails or braces.
- Never erect scaffold within 10 foot of a power line. Call the Utility Company to deenergize the line, relocate the line, or guard the line prior to erecting scaffold and commencing work.
- When scaffold is being erected or dismantled, it will have a sign stating "Incomplete Scaffold Do Not Use."

A scaffold checklist will be used to confirm that each scaffold component unit is erected properly. This will be performed by the competent person. If a component is missing or broken a "Do not use" tag will be placed on the scaffold. When the scaffold is safe to use a "In Use" sign will be hung on scaffold.



LADDER SAFETY POLICY

POLICY

It is the policy of Streeter Associates Inc that all employees and subcontractors use, and maintain all types of ladders in a safe manner while following established guidelines. This will be accomplished through the use of competent and trained employees working with well-maintained equipment that is inspected on a regular basis.

GEBERAL REQUIREMENTS

Falls from improperly used or unsafe ladders usually result in painful and costly injuries. Ladder related injuries can be prevented by ensuring that personnel only use them in accordance with the manufacturer's specifications and standard safety practices.

All employees shall be instructed to use a "three point contact climbing procedure" on ladders at all times.

Employees shall be instructed to use safe methods (such as lowering by rope) when moving awkward or heavy objects by ladder access.

All ladders shall be maintained in good condition, joints between steps and side rails tight, all hardware and fittings securely attached and moveable parts operating freely without binding or undue play. All manufactured ladders will meet appropriate ANSI standards. It is recommended that employees use extra heavy duty type IA ladders when possible.

- Non-slip safety feet will be provided on each ladder.
- Ladder rungs and steps shall be kept free of grease and oil.
- It is prohibited to place a ladder in front of doors opening toward the ladder except when the door is blocked open, locked or guarded.
- It is prohibited to place ladders on boxes, barrels, or other unstable bases to obtain additional height.
- Employees shall face the ladder when ascending or descending.
- Employees are prohibited from using ladders that are broken, missing steps, rungs, or cleats, broken side rails or other faulty equipment.
- Employees shall not use the top two steps of ordinary stepladders as a step.



- When portable rung ladders are used to gain access to elevated platforms, roofs, etc., the ladder must always extend at least 3 feet above the elevated surface.
- When portable rung or cleat type ladders are used, the base shall be placed so that slipping will not occur, or it the ladder will be lashed or otherwise held in place.
- Portable metal ladders will not be used at Streeter Associates.
- Employees are prohibited from using ladders as guys, braces, skids, gin poles, or for other than their intended purposes.
- Extension ladders shall only be adjusted while standing at the base (not while standing on the ladder or from a position above the ladder).
- Ladders shall be kept free from damage including bends, creases, cracks, etc. Damaged ladders tagged, removed from service for repair or destroyed.

TRAINING REQUIREMENTS

All employees who perform work with the use of ladders will be trained by a person qualified (Competent Person) in the subject matter to recognize the hazards associated with the type of ladder being used. All training will be properly documented. Training will also cover procedures to control or minimize those hazards. Training shall also include the seriousness of ladder hazards such as:

- Falls
- Proper Set Up
- Falling Objects
- Electrocution

RETRAINING

When Streeter Associates Inc has reason to believe that an employee lacks the skill or understanding needed for safe work involving a ladder, the employer shall retrain such employee so that the prerequisite proficiency is regained. Retraining is required in at least the following situations:

- Where changes at the worksite present a hazard about which an employee has not been previously trained; or
- Where changes in the types of ladder, fall protection, falling object protection, or other equipment present a hazard about which an employee has not been previously trained; or, Page **68** of **89**



• Where inadequacies in an affected employees work involving ladders indicate that the employee has not retained the requisite proficiency.

COMPETENT PERSON

The proper use, setup, maintenance, and storage of ladders must be done under the supervision and direction of a qualified competent person. Only experienced and trained employees selected for such work by the competent person shall perform such activities.

Competent person means 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 the authorization to take corrective measures to eliminate them.

INSPECTIONS

All ladders will be inspected by a Competent Person prior and during their use. The Competent Person, prior to any employee using a ladder, will make daily inspections. All ladders will be inspected.

LADDER SAFETY PROCEEDURES

Ladders must be inspected quarterly by a qualified person and approved for use before being put into service. Ladders must have an appropriate inspection label.

- Each employee must visually inspect ladders before using. Do not use painted ladders.
- Placing a ladder in a doorway requires that you barricade the doorway with warning signs or tape.
- Always maintain three (3) points of contract when climbing the ladder. Always hold a ladder with two hands. Always face the ladder. Both feet must be kept on the ladder rungs at all times when working off a ladder.
- Always place the ladder on stable, level footing. Always stay within the side rails.
- A safety harness must be worn and tied off independently if working backwards on a ladder. Only one person is allowed on a ladder.



STRAIGHT AND EXTENSION LADDERS

- Place the ladder so the base is out 1/4 the vertical distance from the ground to the object against which the ladder is leaning.
- Ladders must be adequately tied off at the top or held in place.
- When the top of a ladder is used for access, the top of the ladder must extend at least 3 feet beyond the supporting object.
- After extension ladders have been raised to the desired height, the safety latches must be engaged and the extension rope secured to a rung on the base section of the ladder before use.
- Safety harnesses must be worn on ladders if the center of the body reaches beyond the side rails.

STEP LADDERS

- Step ladders must be set level on all four feet, with spreaders locked in place. Never use as a straight ladder. Never stand on the top two steps of a step ladder.
- Stepladders must be tied off when used close to the edge of a platform, roof, floor opening, or pit, or when they are over 10 foot in height.



COMPRESSED GAS SAFETY

All welding & burning will be performed by properly trained personnel only.

TRANSPORTING, MOVING, AND STORING COMPRESSED GAS CYLINDERS

Valve protection caps shall be in place and secured. Compressed gas cylinders shall be a vertical position unless being hoisted. Cylinders shall be hoisted only when secured on a cradle, slingboard, or pallet. Magnets or choker slings shall not be used.

Cylinders shall be moved with the use of a cart. Intentionally dropping or striking is not permitted. Never drag cylinders. Never roll cylinders on their side.. Move cylinders one at a time.

Cylinders shall be transported in vehicles in a secure vertical position. Never store on their side.

Valve caps shall not be used to lift cylinders. Bars shall not be used under valves or caps to pry cylinders loose when frozen. Warm, not boiling, water shall be used.

Regulators shall be removed and valve protection caps put in place before cylinders are moved. Never attempt to repair a cylinder or valve.

Separate oxygen and flammable gas cylinders a minimum of 20 feet apart. Store full and empty cylinders in separate areas.

A suitable cylinder truck or chain shall be used to keep cylinders in an upright position while being used. Be sure the cylinder is secured to a structure capable of supporting its weight'

Cylinder valves shall be closed when work is finished or cylinders are empty or being moved.

PLACING CYLINDERS AND TREATMENT OF CYLINDERS

Cylinders shall be kept far enough away from the actual welding or burning operation to that sparks, hot slag, or flame cannot reach them.

Cylinders shall be placed so that they cannot become part of an electrical circuit. Electrodes shall not be struck against a cylinder to strike an arc.

Fuel gas cylinders shall be placed with the valve end up whenever they are in use. They shall not be placed in a location where they would be subject to open flame, hot metal, or other sources of artificial heat.


Fuel gas cylinders shall not be taken into confined spaces. Cylinders shall never be used as rollers or supports. No person, other than the gas supplier shall attempt to mix gas in a cylinder or refill a cylinder.

Open cylinder valves slowly.

All Gas cylinders of any type will be stored per OSHA guidelines. All employees and subcontractors will comply with these guidelines on any Streeter Associates jobsite. Specific job locations may require the use of cutting/welding permits – these must be utilized as expected at each location. Appropriate PPE will be worn while welding/ cutting.

Never use grease, oil or WD 40 on cylinder threads or caps.



FIRE PROTECTION AND PREVENTION

A fire extinguisher, rated not less than 2A, shall be provided for each 3,000 square feet of the protected building area, or major fraction thereof. Travel distance from any point of the protected area to the nearest fire extinguisher shall not exceed 75 feet.

One or more fire extinguishers, rated not less than 2A, shall be provided on each floor. In multistory buildings, at least one fire extinguisher shall be located adjacent to stairway.

A fire extinguisher, rated not less than 10B, shall be provided within 50 feet of wherever more than 5 gallons of flammable or combustible liquids or 5 pounds of flammable gas are being used on the jobsite. This requirement does not apply to the integral fuel tanks of motor vehicles.

Portable fire extinguishers shall be inspected periodically and maintained in accordance with Maintenance and Use of Portable Fire Extinguishers, NFPA No. 10A-1970

When practical, objects to be welded, cut, or heated shall be moved to a designated safe location or, if the objects to be welded, cut, or heated cannot be readily moved, all movable fire hazards in the vicinity shall be taken to a safe place, or otherwise protected.

If the object to be welded, cut, or heated cannot be moved and if all the fire hazards cannot be removed, positive means shall be taken to confine the heat, sparks, and slag, and to protect the immovable fire hazards from them.

No welding, cutting, or heating shall be done where the application of flammable paints, or the presence of other flammable compounds, or heavy dust concentrations creates a hazard.

Suitable fire extinguishing equipment shall be immediately available in the work area and shall be maintained in a state of readiness for instant use.

When the welding, cutting, or heating operation is such that normal fire prevention precautions are not sufficient, additional personnel shall be assigned to guard against fire while the actual welding, cutting, or heating operation is being performed, and for a sufficient period of time after completion of the work to ensure that no possibility of fire exists. Such personnel shall be instructed as to the specific anticipated fire hazards and how the firefighting equipment provided is to be used.

When welding, cutting, or heating is performed on walls, floors, and ceilings, since direct penetration of sparks or heat transfer may introduce a fire hazard to an adjacent area, the same precautions shall be taken on the opposite side as are taken on the side on which the welding is being performed.

For the elimination of possible fire in enclosed spaces as a result of gas escaping through leaking or improperly closed torch valves, the gas supply to the torch shall be positively shut off at some point outside the enclosed space whenever the torch is not to be used or



whenever the torch is left unattended for a substantial period of time, such as during the lunch period. Overnight and at the change of shifts, the torch and hose shall be removed from the confined space. Open end fuel gas and oxygen hoses shall be immediately removed from enclosed spaces when they are disconnected from the torch or other gas-consuming device.

Except when the contents are being removed or transferred, drums, pails, and other containers which contain or have contained flammable liquids shall be kept closed. Empty containers shall be removed to a safe area apart from hot work operations or open flames.

EYE & FACE PROTECTION

Employees shall be provided with eye and face protection equipment when machines or operations present potential eye or face injury from physical, chemical, or radiation agents.

Eye and face protection equipment required by this Part shall meet the requirements specified in American National Standards Institute, Z87.1-1968, Practice for

Employees whose vision requires the use of corrective lenses in spectacles, when required by this regulation to wear eye protection, shall be protected by goggles or spectacles of one of the following types:

Spectacles whose protective lenses provide optical correction;

Goggles that can be worn over corrective spectacles without disturbing the adjustment of the spectacles;

Face and eye protection equipment shall be kept clean and in good repair. The use of this type equipment with structural or optical defects shall be prohibited

EXTENDABLE AND ARTICULATING BOOM PLATFORMS.

Lift controls shall be tested each day prior to use to determine that such controls are in safe working condition.

Only authorized and trained persons shall operate an aerial lift.

Tying off to an adjacent pole, structure, or equipment while working from inside an aerial lift shall not be permitted.



Employees shall always stand firmly on the floor of the basket, and shall not sit or climb on the edge of the basket or use planks, ladders, or other devices for a work position.

A harness and lanyard shall be worn and attached to the designated anchor point when working from an aerial lift.

Note to paragraph (b)(2)(v): As of January 1, 1998, subpart M of this part (1926.502(d)) provides that body belts are not acceptable as part of a personal fall arrest system. The use of a body belt in a tethering system or in a restraint system is acceptable and is regulated under 1926.502(e).

Boom and basket load limits specified by the manufacturer shall not be exceeded.

The brakes shall be set and when outriggers are used, they shall be positioned on pads or a solid surface. Wheel chocks shall be installed before using an aerial lift on an incline, provided they can be safely installed.

An aerial lift truck shall not be moved when the boom is elevated in a working position with men in the basket, except for equipment which is specifically designed for this type of operation in accordance with the provisions of paragraphs (a)(1) and (2) of this section.

Articulating boom and extensible boom platforms, primarily designed as personnel carriers, shall have both platform (upper) and lower controls. Upper controls shall be in or beside the platform within easy reach of the operator. Lower controls shall provide for overriding the upper controls. Controls shall be plainly marked as to their function. Lower level controls shall not be operated unless permission has been obtained from the employee in the lift, except in case of emergency.

Climbers shall not be worn while performing work from an aerial lift.

The insulated portion of an aerial lift shall not be altered in any manner that might reduce its insulating value.

Before moving an aerial lift for travel, the boom(s) shall be inspected to see that it is properly cradled and outriggers are in stowed position except as provided in paragraph (b)(2)(viii) of this section.

Electrical tests. All electrical tests shall conform to the requirements of ANSI A92.2-1969 section 5. However equivalent dc.; voltage tests may be used in lieu of the a.c. voltage specified in A92.2-1969; dc. voltage tests which are approved by the equipment manufacturer or equivalent entity shall be considered an equivalent test for the purpose of this paragraph (b)(3).

Bursting safety factor. The provisions of the American National Standards Institute standard ANSI A92.2-1969, section 4.9 Bursting Safety Factor shall apply to all critical hydraulic and pneumatic components. Critical components are those in which a failure would result in a



free fall or free rotation of the boom. All non-critical components shall have a bursting safety factor of at least 2 to 1.

HOUSEKEEPING

During the course of construction, alteration, or repairs, form and scrap lumber with protruding nails, and all other debris, shall be kept cleared from work areas, passageways, and stairs, in and around buildings or other structures. All protruding nails must be removed from all scrap lumber and forms to prevent hand / foot puncture wounds.

Combustible scrap and debris shall be removed at regular intervals during the course of construction. Safe means shall be provided to facilitate such removal.

Containers shall be provided for the collection and separation of waste, trash, oily and used rags, and other refuse. Containers used for garbage and other oily, flammable, or hazardous wastes, such as caustics, acids, harmful dusts, etc. shall be equipped with covers. Garbage and other waste shall be disposed of at frequent and regular intervals

SLIP, TRIPS, AND FALLS

Slips are caused by slippery surfaces and/or wearing the wrong footwear. Screws, nails, and short pieces of conduit can also cause slips.

They occur when there is not enough traction between your foot and a walking surface.

Slips usually result in a backwards fall. Clean, dry walking surfaces provide the best traction.

Trips occur when one foot strikes an object and stops suddenly, causing the body to be thrown forward.

If you fall, knowing how to fall can reduce injuries. Keep your elbows, knees, and wrists bent. Don't try to break your fall with your hands or elbows. Tuck your chin in and protect your head with one arm. If possible, land on your side rather than your back

Good housekeeping and adequate lighting are important in preventing slips, trips, and falls.

Pay attention to where you are walking. If you are carrying an oversized object that obstructs your view, ask a co-worker for help.



NOISE IN CONSTRUCTION POLICY

POLICY

Construction workers are among the most affected by workplace noise. The types of workers at risk include, but not limited to:

- Users of impact equipment and tools (i.e. piling hammers, concrete breakers, manual hammers).
- Users of explosives (i.e. blasting, cartridge tools).
- Users of pneumatically powered equipment.
- Operators of heavy machinery.
- Bystanders in the vicinity of the jobsite.
- Operators and bystanders in enclosed spaces where there are noisy activities or a concentration of plant.
- Service and equipment maintenance personnel.

It is the policy of Streeter Associates Inc. to adopt a preventive management program aimed at the reduction of workers' noise exposures. The best ways to achieve this reduction are to employ quiet work practices (like quiet piling systems) and use quiet construction equipment (like silenced compressors). When quieter alternatives are not available, consideration will be given to a site layout to arrange noisy processes away from workers not involved in their operation. Portable barriers can be used around static equipment like generators and concrete pumps.

To achieve better results, noise control aspects will be included in all four stages of any construction project: client's specifications, tenderer's proposal, site planning and construction phase.

WORKSITE SPECIFICATIONS

The worksite specifications may include the following categories:

- Specified noise exposure levels during the construction phase, as per legislative requirements or company policy
- Use of quiet/ silenced equipment
- Adoption of quiet alternative techniques
- Use of noise control measures like silencers, barriers, enclosures
- Erection of warning signs identifying noise hazard areas
- Time restrictions
- Provision of personal hearing protectors and training

STREETER ASSOCIATES' PLAN

Following the worksite specifications, Streeter Associates' plan will cover all the specified categories and formulate a noise control policy and a noise control plan to be included in the site-specific safety management plan.

The noise control plan may be a set of actions required to achieve the noise control policy and to reduce noise exposure. It may also include information on how Streeter Associates is planning to meet its obligations, like:

- List of equipment to be used with noise levels at operator position and/or at 1 m.
- Methods undertaken to lower noise exposure, i.e maintenance, barriers, enclosures.
- Restricted hours, rotation of workers in noisy places, special time arrangements like noisy work done after hours.
- Identification of noisy equipment and processes by signs.
- Site induction for employees and contractors to include noise levels, noise controls and correct use and maintenance of personal hearing protectors.
- Selection and provision of appropriate personal hearing protectors.
- Audiometric tests.

PLANNING OF SITE ACTIVITIES

Streeter Associates will plan to coordinate subcontractors so that the activities of one do not unnecessarily expose employees of another to noise hazards. It is good practice to nominate one person as the noise coordinator for all noisy activities. Site planning should include:

- Preparation of guidance to workers on noise hazards and measures to be taken to reduce noise exposure.
- Preparation of schedules of noisy plant and exposure estimates for each phase of work.
- Laying out the site to separate noisy activities from quieter ones, i.e. concentrate compressors, pumps and generators in screened-off areas or away from the work to be carried out; workshops, materials, etc. away from noisy activities.
- Scheduling noisy activities to take place when the minimum number of other nearby workers are present (but noise out of hours needs to be carefully planned to avoid neighborhood annoyance).



- Rotating workers to minimize exposure times.
- Ensuring that workers are well trained, instructed and supervised in noise matters and responsibilities including correct use and maintenance of personal hearing protectors.

CONSTRUCTION PHASE

Once the construction work is in progress, it is essential to monitor the implementation of the noise control plan. This could be carried out by the Project Manager or the Superintendent and could include the following:

- Checking if equipment brought onto site complies with specifications. This could be done by obtaining information available from suppliers or by noise assessments.
- Reducing noise from identified noise sources by exchanging equipment and/or processes for a quieter alternative or by engineering control methods to quieten the existing one.
- Ensuring that all equipment is properly maintained i.e. all noise control measures like silencers and enclosures are intact.
- Monitoring work schedules to check that noisy work is carried out as specified, away from other workers, outside hours, etc.
- Monitoring if noisy areas are identified and well-marked so employees and contractors can avoid entering them unnecessarily.
- Monitoring whether training and hearing tests have been carried out and if hearing protection is adequate and is being worn and maintained correctly.
- Ensuring that the cause of any hearing loss shown up by audiometry is investigated.
- Utilizing safety toolbox meetings to provide feedback on effectiveness of noise control measures and personal hearing protectors to employees and employers.
- Posting on safety notice boards results of noise assessments conducted and additional noise information.

| OSHA Permissible Noise Limits 1926.52 1910.95 | | ACGIH Threshold Limit Values | |
|---|---------------------|------------------------------|-----------------|
| Noise Level | Exposure Time Hours | Duration - Hours | Sound Level dBA |
| | | 16 | 80 |
| | | 8 | 85 |
| 90 | 8 | 4 | 90 |
| 95 | 4 | 2 | 95 |
| 100 | 2 | 1 | 100 |
| 105 | - | 0.5 | 105 |
| 105 | 1 | 0.25 | 110 |
| 110 | 0.5 | 0.125 | 115 |

HEARING CONSERVATION PROCEEDURES

High noise levels, overtime, can damage your hearing. Employees should be encouraged to cooperate with efforts to reduce workplace noise exposures. These efforts include:

- Placing noisy machinery or operations in separate areas or behind sound barriers.
- Keep equipment lubricated and maintained to prevent squeaks and rattles.
- Place vibrating equipment on rubber mats.
- Replace worn or loose machine parts.
- Choose quieter replacement equipment.
- Install sound barriers around noisy equipment.
- Reduce the time spent in noisy areas.

<u>Use hearing protectors</u> – ear muffs, or ear plugs. Do not use cotton, stereo head sets, or makeshift hearing protection.

Inspect and care for your hearing protection devices.

<u>Replace</u> broken, cracked, stiff or loose-fitting hearing protectors.

Wash your hands thoroughly before inserting or putting on hearing protectors.

<u>Clean</u> hearing protectors regularly. Follow manufacturer's instructions.

Store hearing protectors in a clean, dry place.

<u>Report</u> hearing problems, ringing in the ears, trouble hearing voices, or high or soft sounds; or needing radio or television volume so high, others complain.



ELECTRICAL SAFETY POLICY

POLICY

Streeter Associates is dedicated to the protection of its employees from occupational injuries and illnesses. Streeter Associates is responsible for providing a safe working environment, and the employees have and assume the responsibility of working safely.

The objective of this program is to ensure that each employee is adequately trained and fully aware of safety procedures associated with Electrical Safety.

Elimination of injuries and illnesses improves employee morale, improves customer service, improves product quality, and reduces Workers' Compensation costs.

The designated competent person shall conduct routine safety inspections of jobsites to ensure compliance with this program. The competent person has the authority to enforce the Electrical Safety program in accordance to any and all Streeter Associates safety rules and applicable OSHA and NFPA 70 regulations. Management, as deemed necessary to meet the requirements of the applicable OSHA standards shall designate competent persons.

Employees are required to comply with the guidelines set forth, and to comply with the instruction of the competent person. In the event an unsafe condition arises in the absence of the competent person, employees shall alert the lead person on the jobsite immediately. Employees shall alert coworkers of any unsafe conditions that arise.

Any Streeter Associates employee who disobeys and/or disregards the guidelines set forth in this program or the company's safety program shall be subject to disciplinary action.

All employees are required to comply with the rules set forth in this written program. This program is intended to provide the maximum protection for employees of Streeter Associates.

PROTECTION OF EMPLOYEES

- 1. Utility locator services shall always be utilized by Streeter Associates.
- 2. Streeter Associates employees shall not work in proximity to any part of an electric power circuit in the course of work, unless protected against electric shock by deenergizing the circuit and grounding it or by guarding it effectively by insulation or other means.



- 3. Streeter Associates shall ascertain whether any part of an energized electric power circuit, exposed or concealed, is located in proximity to the employees work area. This is to prevent the employee, tool, or machine from coming into physical or electrical contact with the electric power circuit.
- 4. Streeter Associates shall post and maintain proper warning signs where such a circuit exists. The competent person shall advise employees of the location of such lines, the hazards involved, and the protective measures to be taken.

PROTECTION, INSPECTIONS AND TESTING

- 1. Streeter Associates shall protect employees on construction sites by means of ground fault circuit interrupters (GFCI).
- 2. All electrical receptacle outlets on Streeter Associates construction sites that are used by employees shall have approved ground-fault circuit interrupters for personnel protection. Portable GFCIs should be utilized whenever existing power on a jobsite (such as remodeling/renovation work) is not GFCI protected.
- 3. Cords, plugs, receptacles, and equipment connected by cord and plug shall be visually inspected before each day's use for external defects, such as deformed or missing pins or insulation damage, and for indications of possible internal damage. Equipment found damaged or defective shall be tagged defective and not be used until repaired.
- 4. GFCI Testing:
 - a. Employees and subcontractors shall test all GFCIs daily prior to use utilizing the GFCI's internal tester.

PASSAGEWAYS AND OPEN SPACES

- 1. Streeter Associates shall provide guarding or barriers to ensure workspace for electrical equipment will not be used as a passageway during periods when energized parts of electrical equipment are exposed.
- 2. Walkways and working spaces shall be kept clear of cords to prevent a hazard to employees.



LOAD RATINGS

In existing installation, no changes in circuit protection shall be made where the load is increased in excess of the load rating of the circuit wiring.

FUSES

Qualified Employees shall use insulated tools when installing or removing fuses when one or both terminals are energized.

CORDS AND CABLES

- 1. Only heavy-duty extension cords with ground pins shall be utilized. Workers shall not use worn, frayed, or ungrounded electric cords or cables on Streeter Associates jobsites.
- 2. The ends of electrical extension cords and equipment cords shall be replaced only by a qualified person.
- 3. Extension cords shall not be fastened with staples, hung from nails, or suspended by wire.

TRAINING

- 1. Employees shall receive training on electrical safety on an annual basis.
- 2. Employees shall demonstrate knowledge and understanding of electrical safety under the guidance of the competent person.
- 3. Upon completion of electrical safety training, Streeter Associates shall certify in writing that each employee has received and understands requirements of electrical safety. Certification shall include the employee's name, date of training, and subject of certification.

RETRAINING

When Streeter Associates has reason to believe that an employee lacks the skill or understanding needed for safe work around electricity, management shall ensure that such employee is retrained so that the prerequisite proficiency is regained. Retraining is required in at least the following situations:

- Where changes at the workstation present a hazard about which an employee has not been previously trained; or
- Where inadequacies in an affected employee's knowledge or skills indicate that the employee has not retained the requisite proficiency.

ELECTRICAL SAFETY PROCEEDURE

Electricity if used improperly prevents hazards that can cause serious injury or death. To prevent you and your co-workers from becoming a victim of an electrical accident, the following work practices are to be observed.

Ground Fault Circuit Interrupter (GFCI) – The use of this safety device is mandatory on all construction sites when using temporary electrical of 120 volts single phase for 15 and 20 amp outlets. The device is positioned between the power source and the electrically powered tool. The GFCI is a fast acting circuit breaker, which senses small imbalances of current entering and leaving the circuit. If there is an electrical fault (short) where the amount of electricity "returning" (approximately 5 milliamps) then the GFCI will shut down the electrical power within 1/40 of a second to prevent you from being shocked or electrocuted. GFCI's also provides protection against fires, overheating of tools and equipment and destruction of insulation or wiring.

Safety Procedures – The following common-sense procedures can prevent electrical accidents and injuries. You probably do much of this already. If not, make these procedures a habit.

- 1. Read and follow manufacturer's instructions for your equipment.
- 2. Inspect portable tools before using. Look for broken plugs, frayed cords, bare wires, smoke when running, sparks from switches or erratic operation.
- 3. When necessary to use extension cords, use heavy duty cords. Check for exposed wires, frayed cords, missing ground pins, and broken, bent or defective plugs and connectors.



- 4. Always remove cords from the outlets by the plug, not by pulling on the cord. Be sure that cords are not pinched or cut when using around doorways or across sharp objects. Don't fasten cords with staples.
- 5. Make sure plugs match outlets. Never alter a plug.
- 6. Make sure your hands are dry before using electrical tools. Never stand in wet locations when using electric tools.
- 7. Be cautious around flammable liquids, vapors or dusts when using electric tools. Your tool may act as a source of ignition. Ventilate the area before using electric tools.
- 8. When using or handling long metal objects such as pipe or duct work, beware of touching live electricity. When in doubt, use insulation or other protection.
- 9. Never use metal ladders around live electricity.
- 10. Obey barriers, signs or other warning to stay away from live electrical power sources.



SILICA IN CONSTRUCTION POLICY

HOUSEKEEPING

All exposed surfaces should be maintained free of accumulations of silica dust. Dry sweeping and the use compressed air for cleaning surfaces should be strictly prohibited. Surfaces and equipment can be cleaned using wet methods or by vacuuming with a vacuum equipped with a HEPA (high efficiency particulate air) filter.

HYGIENE PRACTICES

Hand washing and shower facilities will be provided. Employees should be instructed to shower, if possible, and change into clean clothes before leaving the worksite to prevent contamination of cars, homes, and other work areas. Therefore, there should be clean/dirty change areas with provisions for storing clean clothing. Work clothes cannot be cleaned by blowing or shaking. Instead, they should be vacuumed before removal with a HEPA filter.

To prevent ingestion of crystalline silica, there should be separate eating/lunch facilities that are away from areas of exposure. Food drinks, tobacco products, and unapplied cosmetics should not be used in work areas.

To prevent silica dust exposures from leaving the worksite, employees should be instructed to park their cars where they would not be contaminated with silica or other hazardous substances such as lead.

RESPIRATORY PROTECTION

Respirators are not intended as a permanent means of preventing or minimizing exposure to airborne contaminants. Instead, effective control measures such as substitution of less hazardous substances, automation, use of enclosed systems, local exhaust ventilation, wet methods, and safe work practices should be utilized to minimize exposure to crystalline silica. These methods should be the primary means of protecting workers. However, when controls cannot keep the exposure below the OSHA permissible exposure limits, the control measures should be supplemented with the usage of respirators. Refer to the section on respiratory protection for further guidelines.



EMPLOYEE INFORMATION AND TRAINING/RETRAINING

The training of employees is required by the Safety Training and Education Standard (1926.21) and the Hazard Communication Standard (1926.59 and 1926.1200). The information and training program should include the following:

- Information concerning the potential physical and health hazards, and adverse health effects of crystalline silica.
- Safety data sheets for silica masonry products, alternative abrasives, and other hazardous materials.
- Instruction of each employee in the recognition and avoidance of unsafe conditions concerning crystalline silica.
- Discussion about the importance of substitution, engineering controls, work practices, and personal hygiene in reducing crystalline silica exposure.
- Instructions about the proper use and are of personal protective equipment including respiratory protection.
- Details of the Hazard Communication and crystalline silica programs including information on labeling and safety data sheets.
- Instructions about the purpose and set up of regulated areas marking the boundaries of work areas containing silica.

All training should be provided to employees and properly documented. If an employee is deemed to deficient in required knowledge and skills for working safety with regards to silica, management will retrain the employee.



VI.

Subcontractor Safety Coordination

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SUBCONTRACTOR SAFETY COORDINATION

It is the policy of this organization that every subcontractor and his employees are entitled to a safe and healthful workplace.

To ensure a safe and healthful workplace for all, the following will be reviewed with all subcontractors prior to the start of their work.

- Subcontractor Commitment to Safety
- Subcontractor Safety Program
- Hazard Communication Program

This can be accomplished using the attached form, as part of the de-scope meeting, and/or through the subcontractors safety program.

To ensure Subcontractor compliance with all safety guidelines and procedures, the following excerpt is incorporated into every Subcontract:

ARTICLE 10

SAFETY

10.1 SUBCONTRACTOR agrees that the prevention of accidents to workers engaged in the Work is the responsibility of SUBCONTRACTOR and shall maintain a safe and healthful working environment for SUBCONTRACTOR'S employees, sub-subcontractors and suppliers. SUBCONTRACTOR shall comply with the requirements of OSHA Safety and Health Standards (29 CFR 1926) and all other applicable Federal, State and local safety laws, rules and regulations, including site safety rules required by CONTRACTOR. 10.2 SUBCONTRACTOR recognizes that certain federal and state statutes and regulations may impose liability upon the Owner or CONTRACTOR without fault on their part for injuries to SUBCONTRACTOR'S employees. As between SUBCONTRACTOR, Owner and CONTRACTOR, SUBCONTRACTOR agrees that it has the responsibility of providing its employees with a safe place to work. To the fullest extent permitted by law, SUBCONTRACTOR shall hold harmless, defend and indemnify Owner and CONTRACTOR from any liability for damages arising from the failure to provide SUBCONTRACTOR'S employees with a safe place to work or to comply with statutes and regulations, regardless of any contrary apportionment of liability.

10.3 SUBCONTRACTOR shall comply with all applicable Federal, State and local Hazardous Material Right to Know laws, rules and regulations (HAZMAT). SUBCONTRACTOR shall cooperate with CONTRACTOR in complying with and implementing procedures required by HAZMAT including providing Safety Data Sheets required for the Work.

10.4 SUBCONTRACTOR shall report all accidents involving its employees to the CONTRACTOR'S site Superintendent as soon as practicable after the occurrence of an accident. A written report of the accident must be delivered to CONTRACTOR'S site Superintendent within twenty-four (24) hours following an accident.

10.5 SUBCONTRACTOR shall on a daily basis inspect areas where its employees are working and give CONTRACTOR immediate notice of any condition beyond its control that SUBCONTRACTOR believes is hazardous to the safety or health of its employees. SUBCONTRACTOR shall give CONTRACTOR written notice within twenty-four (24) hours after discovering any such condition.

10.6 SUBCONTRACTOR agrees to stop any part of the Work which CONTRACTOR deems unsafe until corrective measures satisfactory to CONTRACTOR have been taken. Should SUBCONTRACTOR neglect to adopt such corrective measures, CONTRACTOR may perform them and deduct the cost from payments due or to become due to SUBCONTRACTOR