Thurston Mechanical, LLC

Safety & Haz-Com Program

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Purpose of Program

Thurston Mechanical has made a serious commitment to provide a safe and healthy workplace where everyone can pursue their tasks without placing their health and safety in jeopardy.

The law (OSHA) clearly states that each employer must provide a safe workplace and each employee must comply with safety and health rules and regulations.

Laws mandate safety programs, but it is up to the employer and employees, working in unison, to make a program work. Safety concerns are perpetual. Unsafe conditions do not cure themselves. Constant attention and alert attitude are some of the best defenses against unsafe conditions.

The following pages should explain clearly our company's policy concerning safety. If there are any questions about the safety program, ask. It is the intent of the company to make sure that all employees are familiar with and understand all aspects of this program.

Our safety and health program include the following:

1. Requiring all employees working for us to follow all of our safety requirements listed in this program, in addition to all OSHA requirements.
2. Providing a written safety program and hazard communication program, training all employees in good safety and health programs. Staying current with OSHA rules and requirements. Providing necessary personal protective equipment (PPE), its care and usage and requiring all employees to follow safety rules.
3. It also includes an ongoing program concerning safety, the possible discharge of any person violating the rules of the company, the banning of anyone known to be under the influence of any drugs or alcohol and notification to the authorities of anyone in possession of illegal drugs.

Work place accidents can be prevented. Accidents cost us all money in many direct and indirect ways:

1. Productive time lost by an injured employee.
2. Productive time lost by employer, supervisor and other employees attending the injured employee.
3. Clean up, shut down and start up operations imposed by the accident(s).
4. Time and expense in hiring or retraining employees to replace the injured employee.
5. Time and expense to replace damaged equipment and/or inventory.
6. Increase in workman's compensation costs.
7. Increase in insurance rates.
8. Reduced moral among employees.
9. Cost of processing paper work and reports required by various agencies.

Monetary Loss to our company is also a direct loss to employees. The money spent on accident costs could be used to improve the workplace

As employees, you are our most valuable assets. Your safety comes before all else.
All training/re-training will be provided annually and as needed.

All safety training is documented.
Certification includes employee name, dates of training, and training content.

Safety Goals

Our safety goal is to have an accident-free workplace, as well as a safe and relaxing atmosphere.

By obtaining the goals set forth in this program, the company and the employees will benefit.

Another goal is to make everyone at our company aware of safety problems or unsafe situations so that when employees do come in contact with them, they will recognize, avoid and correct them.

As stated throughout this program, a safe work environment for all is the major goal.

All safety rules listed in this book are company policy.

Equal Opportunity Employer

We are committed to the full use of all human resources and to a policy of equal employment opportunity. The company will NOT discriminate against employees or applicants on any legally recognized basis including, but not limited to – race, age, color, religion, sex, marital status, national origin, non-job-related handicap/disability, veteran status or sexual orientation.

Non-harassment Policy

It is the policy of the company to promote harmony and understanding between fellow employees. Harassment of any type by anyone will not be tolerated. This includes slurs, epithets, threats, derogatory comments, unwelcome jokes, teasing, sexual advances and other similar verbal or physical contact.

If you feel that you are the victim of harassment, report it immediately, both verbally and in writing. Violation of this policy will result in immediate dismissal.

Discipline

As repeated throughout this program, a violation of the safety rules could result in dismissal. Management is responsible for enforcing the rules. Supervision also bears this responsibility.

Safety is the number one concern at Thurston Mechanical

If you violate a safety procedure, the following may happen:

1st Occurrence – a written report will be placed in personnel file.

2nd Occurrence – time off without pay, a written report in personnel file.

3rd Occurrence – may result in termination.

When a violation occurs, management/supervision will meet with the employees to discuss the reason for the infraction and to explain why the rule is necessary. Job site violations require a copy of the report to be filed

with the project manager and/or owner also.

Any serious violation of any safety rule or procedure, which could cause serious danger to the employee or others, will result in immediate dismissal.

Any violation of the drug/alcohol program may result in immediate dismissal.

Employee Rights

1. Employees have the right to complain to OSHA at any time about workplace safety and health hazards, but it is important for the company to be make aware of any such issues or potential hazards so that they can be addressed/corrected.
2. It is illegal for employees to be discriminated against for exercising this right.
3. Employees cannot be punished for refusing any work they believe would put them in real danger of death or serious physical injury.
4. If an employee is punished or in any way discriminated against for exercising his/her rights under the OSHA act, the employees shall report it to OSHA within 30 days. OSHA will investigate. If necessary, OSHA will go to court to protect the rights of the employee.

No book can cover ALL safety rules. Basic common sense will protect you more than anything else. If it doesn't feel right – don't do it. If you think you could be hurt or hurt someone else – don't do it.

If you have any suggestions for the program, please let us know.

Employee Responsibilities

Each employee at our company is responsible for his/her own safety and the safety of his/her fellow workers and company visitors. Each employee will obey all company rules as well as all Federal, State and common-sense rules. If on a job site, the rules of the general contractor, project manager and owner must also be followed.

Employees must report all accidents immediately, no matter how minor.

Employees will use all PPE and safety devices; they will be "drug free". Employees are required to attend all training sessions for safety and health programs.

Basic Rules

As employees, the success of our safety and health program depends in a large part on you and your actions. You are the primary reason for our training program. A clean safe workplace is essential to all of us. The following safety rules will call attention to some of the safe practices that must be followed by everyone if accidents and illnesses are to be kept to a minimum.

IN THE EVENT OF A SERIOUS INJURY, CALL 911

Here are some very basic safety rules to be followed:

1. If a serious accident occurs, call 011.
2. Know where all exits are. They are usually marked.
3. Know the location of fire extinguishers. You should know how to use them.
4. Wear safety glasses, goggles, face shields when welding, cutting, burning or grinding**. Protect your eyesight!**
5. Steel-toed safety shoes or ANSI/ASTM approved work shoes are to be worn both in the shop and the field.
6. Use your ear protection in noisy environments.
7. Use gloves when needed or required.
8. Any accident, no matter how minor, must be reported to supervisor/project manager.
9. Make sure that all equipment has proper safety devices, shields and guards in place before using. If safety devices are not present or not operable do not use the equipment.
10. New or unfamiliar equipment is not to be used until you are shown the proper handling and use by a supervisor.
11. Do not smoke, burn or carry lighted objects near flammables. Do not grind near flammables.
12. Keep all containers of flammable or hazardous materials closed when not in use.
13. Report all equipment failures at once.
14. If any equipment needs maintenance, inform supervisor.
15. Keep all work areas clean. Pick up tools, metal, bolts and any other tripping hazards.
16. Keep all walkways and aisles clear at all times.
17. Do not leave nails, bolts or any other sharp object protruding where they will create a hazard for yourself or others. Correct any such situation when found.
18. Always leave yourself enough clearance (escape room) in case material slides or fails.
19. Safely dispose of any used materials. Store unused materials in a safe place for future use.
20. Read all instructions. This only takes minutes and can save your life.
21. Do not leave anything laying on the floor.
22. Always shut off machinery when not in use.
23. When going up and down stairs, use a handrail.
24. Dispose of any unused materials properly.
25. When lifting heavy objects, employees should bend their knees and use the larger muscles of the legs, rather than lifting with your back. Back injuries are the most common, persistent and painful types of workplace injuries. If it is heavy – get help lifting.
26. Never throw materials, tools or any other objects from any height until proper precautions are taken to protect others from falling objects.
27. Always wash exposed areas of skin after handling injurious or poisonous substances.
28. Gasoline shall not be used for cleaning purposes.
29. Do not use, adjust, and/or repair machines or equipment unless you are qualified and trained to do so.

Safety can only be achieved through the efforts of everyone at our company. Each person must regard safety as the number one concern. By thinking defensively, recognizing unsafe situations, reporting unsafe conditions and working constantly to create a safe environment we can maintain an accident free workplace.

A violation of a safety rule is, in itself, an unsafe act. A violation will be grounds for disciplinary action – the extent of which will be based upon the nature of the violation.

Do not exceed the capabilities of any machinery or equipment. Always support the ends of steel or other materials when cutting. Stabilize all materials to prevent swinging, dropping or shifting or moving in a manner that creates a hazard.

30. Do not wear loose clothing that can snag or be caught in machinery or other equipment. Do not wear jewelry (rings, necklaces, bracelets, etc.) or any other item that may become caught on or in equipment.
31. Everyone has been trained and is required to know basic first aid. Thurston Mechanical provides both First Aid and CPR Training provided by a third party that is certified by the American Red Cross.
32. It is a requirement that all employees wear steel-toed or ANSI approved boots while working. No exceptions to this rule.
33. Long hair must be worn so that it cannot be caught in machinery or equipment.
34. Do not engage in horse play on the job.
35. Hitting, hurting and/or inflicting personal injury on other persons while on the job will not be tolerated.
36. Willful negligence or contributing to damage of company property will result in termination.
37. No illegal drug or alcohol use or possession will be tolerated. This company is a "drug free" environment. Do not drink alcohol or use drugs before coming to, or while at work. No alcohol is to be consumed during lunch hours – if it is, employee may not return to work that day, and will not be compensated for lost time. Anyone found to be under the influence of drugs or alcohol during working hours will be driven home. You will not be compensated for lost time. Do not report to work if you have been drinking or are under the influence of drugs. Failure to seek professional help could result in termination. Anyone with a substance abuse problem is strongly urged to enroll in a rehabilitation program at their own expense.
38. Gambling on company time and/or property is expressly forbidden.
39. If someone is hurt or has had a serious accident, call 911. If you have been trained to do so, and choose to do so, you may begin to administer CPR.
40. In the absence of an infirmary, clinic, hospital, or physician, that is reasonably accessible in terms of time and distance to the worksite, which is available for the treatment of injured employees, a person who has a valid certificate in first aid shall be available at the worksite to render first aid.
41. First Aid kits are provided in job boxes on every job site. Kits consist of appropriate items which will be adequate for the environment in which they are used. Kits are stored in weather proof containers with individually sealed packages of each type of item. First aid kits shall be checked before being sent out to each job and at least weekly.
42. Proper equipment for prompt transportation of injured person(s) to a physician or hospital and a communication system for contacting necessary ambulance service will be provided at each job.
43. Motor vehicle incidents occurring while on company business must be reported. Employee must call emergency services and notify supervisor.
44. Any cargo on or in motor vehicles must be adequately stored and secured to prevent unintentional movement of the equipment which could cause spillage, damage to the vehicle, or injury to the operator.
45. Pre-use inspections should be performed before operating a vehicle. This consists of a walk-around the vehicle to check for any defects to the vehicle and ensure there are no barriers blocking the path. Company-owned vehicles have a maintenance program in place meeting the minimum manufacturer's recommendation. Employees driving personal vehicles for company business must conduct pre-use inspections and regular vehicle maintenance.
46. Vehicle operator must verify trailer or truck chocks, supports, and dock plates prior to loading/unloading
47. **THURSTON MECHANICAL PROHIBITS WORKING ALONE ON ANY JOB SITE – ALL EMPLOYEES MUST BE ACCOMPANIED BY AT LEAST ONE OTHER WORKER.**

Waste Management

Thurston Mechanical LLC works with all clients to identify all waste removal requirements, including volume of waste, proper disposal methods and any recycling requirements.

Unauthorized visitors are forbidden on company property and job sites.

New Employee Training

All new employees at our company will receive basic safety and health training from the supervisor or their immediate supervisor. This training will include the material in the written safety and health, Haz-Com and employee handbook as well as any required training for special applications, re: respirators, ear protection, permits, fork lift operation, etc.

After the initial training, they will be on the regular training program.

New employee training will be conducted on the first day of employment before work begins. If it is not completed, it will continue the next and following days until it is complete.

If possible, training will include videos and live demonstrations.

It is the Supervisor's responsibility to enforce all safety precautions, to see that all the training required is up to date, that all records are up to date, and that all employees are thoroughly trained.

Responsibilities

Because our company is a prime contractor or a subcontractor, we are responsible to the Project Superintendent, General Contractor and owner. Supervisors from Thurston Mechanical are responsible for ensuring that all phases of safety requirements of our company, the general contractor and the owner are followed.

As stated previously, the field Supervisor will be responsible for all aspects of jobs safely, including but not limited to the following:

1. The safety of employees while at work.
2. The safety of the public as related to job activity.
3. Corrective action if any safety violations are discovered.
4. Proper inspection of jobsite and shop.
5. Accident investigation, documentation and reporting.
6. Daily communication with safety managers, construction managers and employees.
7. Pre-job safety evaluations.
8. Good housekeeping rules are implemented and followed.
9. Daily equipment checks, ensuring repairs or replacements are conducted.
10. Following of all governmental standards and regulations.
11. Disciplining employees for any violations.
12. Distribution, as required, of all necessary PPE.
13. Toolbox safety talks on weekly basis.
14. Arranging immediate first aid.
15. Attending all safety meetings.

Employees are responsible for their own safety and the safety of those around them.

Company President and Safety Director is Peter D. Thurston
Safety Consultant for Thurston Mechanical is Sexton Services. 585-739-9763

Safety Training

Management at our company is solely responsible for all safety and health training. The company will train the supervisor who in turn will train the shop and field employees.

The supervisor on the jobsite will inform the General Contractor or owner relevant training.

Yearly programs concerning all phases of this entire program will be provided by management. Monthly safety talks will be given by the foremen both at the shop and jobsite.

All employees will have a minimum of one training session yearly for each of the following:

Respirators	Haz-Com
Fire Extinguisher Use	Lockout/Tagout
First Aid (basic)	Confined Space Entry

Management and the Supervisor will never assign work to any employee who has not been properly trained. If any work requires a physician's statement, work will not begin until so approved by a doctor.

An on-going training program will continue weekly, monthly and as needed with the direction coming from management, suppliers and industries of the area.

Fitness For Duty

PURPOSE

Overview

Thurston Mechanical LLC, hereafter referred to as "The Company", is committed to providing a safe working environment and to protecting the health and safety of workers, staff, visitors, and The Company property.

DEFINITIONS

Fitness for Duty - physical and mental health status that facilitates the performance of essential job duties in an effective manner and protects the health and safety of oneself, others and property.
Medical certification - a document from a medically appropriate, licensed provider attesting to a worker's fitness for duty following an extended medical absence. Allowable costs to obtain the certification are paid by Workers Compensation for work-related absences, and by the worker and the worker's health insurance for absences which are not work-related.
Medical evaluation - An examination performed by a designated health professional, including but not limited to a health history, physical and/or psychological examination and any medically indicated diagnostic studies. The cost is paid by the employer.
Reliable report - self-disclosure or third-party opinion about a worker's possible lack of fitness for duty which is assessed as reasonable by the manager/supervisor considering such factors as the relationship of the reporter to the worker, the seriousness of the worker's condition, the possible motivation of the reporter and how the reporter learned the information.
Working hours - beginning with a worker's starting time and ending with the worker's quitting time as well as

any time a worker is on call. All work activities are included whether they occur on or outside The Company properties.

RESPONSIBILITIES

Worker responsibilities

Reporting to work, fit for duty.

Notifying the manager/supervisor when not fit for duty.

Notifying the manager/supervisor when observing a co-worker who may not be fit for duty (in cases where the possibly impaired individual is the worker's manager, the worker should make the notification to the next higher-level manager or the Director of Human Resources/Payroll).

Cooperating with a manager/supervisor's directive, and, or referral for a medical evaluation.

Manager/supervisor responsibilities

Observing the attendance, performance, and behavior of workers they supervise.

Interviewing a worker who appears to the manager/supervisor, (or third-party report) unfit for duty and referring a worker for a medical evaluation when appropriate.

Recording the reasons/observations, that triggered a fitness for duty medical evaluation referral.

Utilizing this policy in a fair and consistent manner, respecting the worker's privacy, and the confidentiality of medical information.

PROCEDURES

Return to Work (after an extended medical absence)

- Manager/supervisor receives medical certification from worker prior to their return to work, with suggested accommodations, if applicable.
- Manager/supervisor determines whether worker can perform essential functions of the job with or without accommodation, accepting suggested accommodations or developing alternative accommodations.
- Manager/supervisor provides accommodations if applicable per job description/scope and worker complies with medical direction provided by physician or healthcare professional.

Triggering Event occurs when a manager/supervisor observes or receives a reliable report of a worker's possible lack of fitness for duty. Observations may include, but are not limited to a worker's self-reports, manual dexterity, coordination, alertness, speech, vision acuity, concentration, response to criticism, interactions with co-workers and supervisors, suicidal or threatening statements, change in personal hygiene, presence of condition likely to lead to food borne disease transmission, memory and/or odor of alcohol or marijuana. Management actions include:

- Manager/supervisor interviews workers, when possible.
- Manager/supervisor assesses magnitude of safety risk and are encouraged to contact Human Resources/Payroll for assistance.
- No Risk: keep notes of events.
- Minor Risk: encourage workers to use Worker Assistance Program (see The Company policy) or seek medical treatment; document event.
- Significant Risk: Contact local Police if appropriate, place worker on paid leave of absence (sick leave or paid administrative leave, depending on situation, arrange for worker's safe transportation home if situation warrants. Refer worker to Worker Assistance Program or for medical evaluation, implement discipline, if appropriate.
- Severe risk: Contact local Police, place worker on paid leave of absence, arrange for worker's safe transportation home, and implement appropriate discipline.

Outcomes

Workers voluntarily seeking assistance for physical (including controlled substance, drug, and alcohol abuse/addictions), mental, and/or emotional problems before their work performance or attendance is adversely affected will not have their employment status jeopardized for seeking assistance.

Workers cooperating in a medical evaluation and in compliance with recommendations for medical, psychological and/or chemical dependence treatment may be returned to the job provided appropriate discipline, if warranted, has taken place.

Workers posing a severe risk may be subject to discipline up to and including termination of employment.

Project Safety Plan

In addition to our company's safety and health plan, each project will have a specific safety plan. When a new job is awarded, our company will go over the project with both the project manager and the owner to assure that all concerns of safety and health are addressed. After a program is finalized, it is the Supervisor's responsibility to see that it is adhered to. The Supervisor will know and make known to all employees the following:

- Emergency contacts and phone numbers
- Location of all safety equipment
- Contact numbers for medical, fire, spill and release and utility companies

The Supervisor will be responsible to ensuring that all employees have the proper PPE, as well as a list of all materials to be used/encountered and the corresponding SDS information.

If any special licenses, qualifications or permits are required, the Supervisor will review the personnel records of those doing the work to see if any additional training is required.

The Supervisor will advise all employees of any special phone numbers needed, such as security, environmental staff, etc.

Prior to starting any job, the Supervisor will call a pre-job safety and loss control project orientation meeting

with the site manager. There will be no exceptions to this rule.

Subcontractors

Subcontractors will adhere to the following:

1. The Supervisor is responsible for obtaining all pertinent information involving policies and safety from project managers, owners and other subcontractors. He/she is also required to make known to all other the same information set forth by our company.
2. It is the Supervisor's job to get permission and special instructions related to the jobsite safety before any work is performed.
3. It is the Supervisor's job to have in order all permits, insurance certificates, doctors' papers, posters, etc. and give to safety coordinator before any job begins.
4. The Supervisor will be sure all PPE is furnished, training is completed, hazards are explained, emergency numbers are posted, fire protection and first aid materials are available.

Tools and Equipment

1. The company tries to keep all tools and equipment in good condition. However, oversights may occur. Report any issues to supervisor.
2. Employees using hand and power tools and exposed to the hazard of falling, flying, abrasive, and splashing objects, or exposed to harmful dust, fumes, mists vapors, or gases will be provided with particular PPE necessary to protect them from the hazard.
3. Be sure that all switches are in the OFF position and that the foot treadle is properly blocked when changing punches, dies or blades on any presses. Be sure to lock out power source!!
4. Always shut off machinery when not in use.
5. Faulty or improperly used hand tools can cause serious injury. Always check before using.
6. Be sure grinders, saws and similar equipment have approved safety guards operational.
7. Always use the correct shields, guards or attachments recommended by the manufacturer. When using power tools, remember that one tool does not fit all jobs.
8. Be sure rotating and moving parts of equipment are shielded to prevent physical contact.
9. Before trying to remove, repair or adjust any electrical component – be sure it is turned off and disconnected from any power supply.
10. All cord connected, electrically operated tools and equipment must be effectively grounded. If any wires are worn or broken do not use and report to supervisor.
11. Bench or pedestal grinders must be permanently mounted before using.

Always wear goggles and/or face shield when grinding!

12. Never pick up a new tool and assume that you know how to use it. Be sure to ask for and receive proper instructions first.
13. All machinery and equipment are to be kept clean. This is everyone's job. When you finish using something, clean it and put it back in its proper place.
14. Keep faces of hammers in good condition to avoid injuries.

15. All files must be equipped with handles.
16. Never use a file as a punch or pry bar.
17. Do not use screwdrivers as chisels.
18. Do not lift or lower portable electrical tools by their cords.
19. Do not leave tools and equipment laying on the floor.
20. Keep tools in their proper storage places.
21. Do no carry tools in pockets. Use a tool belt or kit.
22. If you use an electrical tool, it must be approved double-insulated, grounded, or both.
23. Non-sparking tools shall be used in hazardous environments.
24. Broken or damaged tools shall either be identified as unsafe by tagging or locking the controls to render them inoperable or shall be physically removed from the place of operation.

When cutting and grinding, always use eye and ear protection!!

Electrical

1. Safe work practices must be employed to prevent electric shock or other injuries resulting from either direct or indirect electrical contacts when work is performed near or on equipment or circuits which are or may be energized.
2. Conductive items of jewelry or clothing shall not be worn unless they are rendered non-conductive by covering, wrapping or other insulating means.
3. Conductors and parts of electrical equipment that have been de-energized but not been locked or tagged out shall be treated as live parts.
4. When working near overhead lines, a clearance distance of 10' must be maintained or the lines must be de-energized and grounded. The lines shall be deenergized and grounded or other protective measures shall be provided before work is started. Any vehicle or mechanical equipment capable of having parts of its structure elevated near energized overhead lines shall be operated so that a clearance of 10 ft. (305 cm) is maintained. If the voltage is higher than 50kV, the clearance shall be increased 4 in. (10 cm) for every 10kV over that voltage.
5. When an unqualified person is working in an elevated position near overhead lines, the location shall be such that the person and the longest conductive object he or she may contact cannot come closer to any unguarded, energized overhead line than the following distances:
   - For voltages to ground 50kV or below - 10 feet (305 cm);
   - For voltages to ground over 50kV - 10 feet (305 cm) plus 4 inches (10 cm) for every 10kV over 50kV.
6. When a qualified person is working in the vicinity of overhead lines, whether in an elevated position or on the ground, the person may not approach or take any conductive object without an approved insulating handle closer to exposed energized parts than shown in Table below.
   Voltage range (phase to phase) | Minimum approach distance
   300V and less .....| Avoid Contact
   Over 300V, not over 750V .....| 1 ft. 0 in. (30.5 cm).
   Over 750V, not over 2kV .....| 1 ft. 6 in. (46 cm).
   Over 2kV, not over 15kV .....| 2 ft. 0 in. (61 cm).
   Over 15kV, not over 37kV .....| 3 ft. 0 in. (91 cm).
   Over 37kV, not over 87.5kV .....| 3 ft. 6 in. (107 cm).
   Over 87.5kV, not over 121kV .....| 4 ft. 0 in. (122 cm).
   Over 121kV, not over 140kV .....| 4 ft. 6 in. (137 cm).
7. Immediately report any loose, bare, frayed or handing wires on any electrical equipment.
8. Do not use bare, broken or frayed extension cords. Report such conditions at once.

9. If any electric motor or equipment smokes or sparks, shut it down immediately and report it. Do not use equipment until it is repaired or replaced. All defective equipment must be removed from service and either repaired or discarded. This includes broken plugs and damaged cords, etc.
10. Place extension cords and electrical cables in such a manner that they will not become tripping hazards or interfere with work. Do not roll anything over electrical cords.
11. Do not lift or lower equipment by their cords.
12. Always use ground fault circuit interrupters.
13. Any electrical work must conform to the current national codes.
14. Never fasten electrical cords with nails, staples or wire to walls or other objects.
15. Exposed bulbs must be guarded to prevent accidental contact.
16. Temporary lighting shall not be hung by its cord unless designed to do so.
17. Circuits must be disconnected, locked out and tagged out when electrical repairs or tie-ins are to be made.
18. Employees may not enter spaces containing exposed energized parts unless illumination is provided that enables the employees to work safely.
19. Protective shields, protective barriers or insulating materials will be provided as necessary.
20. Portable ladders shall have non-conductive side rails.

The supervisor is responsible for all aspects of the electrical program, including safety and training. The supervisor will ensure that only qualified electricians do electrical work. Any person not trained to do electrical work may not perform any such functions.

The supervisor and/or electrician will check all electrical equipment before a job starts. Any faulty equipment will be repaired or replaced. Supervisor will also be responsible for continuity testing of equipment grounding, including receptacles, cords and plugs.

The supervisor will not allow unauthorized employees near live components of electrical circuits unless the employees are nearby de-energizing and grounding components, guarding the component by insulation and/or other effective means. He will erect barriers, fence, or other deterrents ensuring that the workspace for electrical equipment will not be used as a passageway during periods when energized components are being used.

When working on electrical equipment or circuits, all employees will be thoroughly trained in lockout and tagout procedures.

Ground Fault Protection

Insulation and grounding are two recognized means of preventing injury during electrical equipment operations. Placing non-conductive material such as plastic around the conductor may provide conductor insulation. Grounding may be achieved through the use of a direct connection to a known ground such as a metal cold water pipe.

The use of a ground fault circuit interrupter (GFCI) is one method used to overcome grounding and insulation deficiencies.

With the wide use of portable tools on construction sites, the use of flexible cords often becomes necessary. Hazards are created when cords, cord connectors, receptacles and cord and plug connected equipment are improperly used and maintained. Flexible cords must be connected to devices and to fittings so as to prevent

tension at joints and terminal screws.

A frequent hazard on site is a cord assembly with improperly connected terminals.

When a cord connector is wet, hazardous leakage can occur to the equipment grounding connector and to humans who pick up the connector if they also provide a path to the ground.

GFCIs can be used successfully to reduce electrical hazards on site. Tripping of GFCIs (interruption of current flow) is sometimes caused by wet connectors and tools. Providing more GFCIs or shorter circuits can prevent tripping caused by leakage from using several tools, or leakage cause by extremely long circuits.

It is management's responsibility to provide:

- Ground fault circuit interrupters on construction sites for receptacle outlets in use and not part of the permanent wiring of the building or structure.

Management is required to provide approved ground fault circuit interrupters for all 120V, single-phase, 15- and 20-AMP receptacle outlets on site which are not part of the permanent building wiring and are in use by employees.

Supervisor will be responsible for the required training for ground fault protection. The shop and field foremen will train and advise employees in the correct use of this equipment.

Our company uses only GFCIs and never an assured grounding program.
There are no exceptions to this rule.

Lockout/Tagout

Thurston Mechanical, LLC. is a Mechanical Contractor. We are often required to work in situations requiring lockout/tagout. It is imperative that the Supervisor be aware of all safety aspects concerning this procedure of energy isolating devices.

In addition to knowing the OSHA requirements, the Supervisor will be given training by a designated lockout coordinator before beginning any work on mechanical, electrical, etc. systems.

The project manager will inform the Supervisor as to the location of lock and tag valves, switches, etc. The Supervisor will then instruct his employees.

Lockout/tagout can be for electricity, motors, stem, natural gas, compressed air, hydraulic systems and sewers to name a few.

In the event of an emergency or accident, first take care of any injured person, call 911 and notify the general contractor, the owner and your supervisor.

There are restrictions required when work involves lockout/tagout. Because this procedure is seldom used in our type of work, it is important that you know and understand these restrictions. The Supervisor will go over these as often as needed to ensure a safe, accident-free job.

1. Each employee will have his/her own lock & tag. At no time will one employee use another employee's lock & tag. **Doing so may result in dismissal**.
2. The isolated devices that are locked and tagged must include all the devices which control the energy. They must be singularly identified. They must not be used for any other purpose.
3. Locks, hasps and tags must be able to withstand adverse weather and environmental conditions. Tags must be readable (message legible) regardless of adverse conditions.
4. Only the person who applied the lock and tag may remove the lock and tag.
5. All workers involved in the maintenance activity must place their own lock and tag on each energy control point

On jobsites where a lockout/tagout is required, it is the Supervisor's responsibility to maintain a log. The log will contain the following:

1. The date and time of the installation of lockout/tagout devices.
2. The date and time of removal of locks and tags.
3. The name of employee who applied the lock and tag.
4. Thurston Mechanical's name, address and phone number.
5. The lock number being used.
6. The machine being disconnected and locked out.
7. The reason for the lockout of the system.
8. Who is authorized to proceed with work duties?

The Supervisor will inform all employees that a lockout/tagout system is in use and the reason for its use. He/she will explain to those authorized to use the lockout, the types of hazards involved.

In the event that a machine is operating, shut it down via the normal procedure before working on it.

All switches, valves or other energy isolating devices must operate so that the equipment is totally isolated from the energy source. An authorized employee must place a lock on each isolating device. Stored energy must be dissipated and/or restrained by methods such as repositioning, blocking, bleeding, disconnecting, etc. The locks used must contain the energy isolating device in a "safe" or "off" position. Tags must read "DANGER – DO NOT OPERATE". Tags must be on each lock. Each tag will have the name of the employee, employer and date.

Before checking the equipment to make sure it does not work, verify that no employees or personnel are exposed. To check if all systems are off or disconnected, operate the controls in the normal manner. Always return operating controls to the "off" position after the test.

In some cases, a lock cannot be used. The General Contractor and/or Owner will advise the Supervisor in these situations and tags will be used. It is the Supervisor's responsibility to inform the employees that tags are only a warning device. Because no physical restraint is used, the danger will be greater. Tags are not to be removed without the authorization of the person who put them there. Tags not only must be securely attached so that they cannot be accidentally detached but must be legible at all times so that the dangers are understandable.

After the job is complete and the locks and tags can be removed, the Supervisor will check the areas around the machine or equipment to ensure that no one is exposed. He will also check for tool removal from the system, verify what guards have been reinstalled and that all employees are clear of the area. He will then notify the lockout/tagout coordinator before the tags and locks are removed.

In the event that an employee has forgotten to remove a lock or tag, and is not available to do so, the Supervisor will notify the lockout/tagout coordinator. The coordinator is the only person who can then remove the locks and tags. He will do so only after he has verified that:

1. It is safe to restore the energy.
2. The employee who applied the devices is not present and that all reasonable efforts have been made to contact the authorized employee.
3. The employee who applied the devices will be informed that the lock/tag was removed before resuming work.

Group Lockout/Tagout Procedure:

If more than one authorized employee is required to lockout or tagout equipment, the following organizational procedures/structure shall be followed:
1. A primary authorized employee shall be designated to exercise primary responsibility for implementation and coordination of the lockout/tagout of hazardous energy sources and for the equipment to be serviced.
2. The primary authorized employee will coordinate with equipment operators before and after completion of servicing and maintenance operations that require lockout/tagout.
3. A verification system will be implemented to ensure the continued isolation and de-energization of hazardous energy sources during maintenance and servicing operations.
4. Each authorized employee will be assured of his/her right to verify individually that the hazardous energy has been isolated and/or deenergized.
5. When more than one crew, craft, department, etc. is involved, each separate group of servicing/maintenance personnel will be accounted for by a principal authorized employee from each group.
Each principal authorized employee is responsible to the primary authorized employee for maintaining accountability of each worker in that specific group.
No authorized employee may attach or remove another authorized person's lock/tag unless the provisions of the exception to 29 CFR1910.147(e)(3) are met.

The lockout/tagout process for each authorized employee includes:

1. Each authorized employee shall place his/her own personal lockout device or tagout device on the energy isolating device(s).
2. When an energy isolating device cannot accept multiple locks or tags, a multiple lockout or tagout device (hasp) may be used.
3. If lockout is used, a single lock may be used to lockout the machine or equipment with the key being placed in a lockout box or cabinet which allows the use of multiple locks to secure the box or cabinet.
4. Each authorized employee will then use his/her own lock to secure the box or cabinet.
5. As each authorized employee no longer needs to maintain his/her lockout protection, that person will remove his/her lock from the box or cabinet and verify or observe de-energization of the equipment.

Only employees who have been trained in lockout/tagout procedures can perform such duties.
Re-training in lockout/tagout training will be conducted annually during the company safety training and as additionally warranted. The Lockout/Tagout procedure is inspected annualy.

Many jobsites/companies employ their own specific lockout/tagout procedures in addition to the OSHA requirements. It is our company's policy to follow such procedures.

Welding, Cutting & Hot Work

1. Before welding/cutting is permitted the area shall be inspected and a written permit shall be used to authorize welding and cutting operations.
2. Operators of equipment should report any equipment defect or safety hazards and discontinue use of equipment until its safety has been assured. Repairs shall be made only by qualified personnel.
3. Do not leave burning or welding equipment on the floor.
4. Only authorized and trained personnel are permitted to use welding and cutting tools.
5. Each piece of equipment comes with operating instructions. These should always be followed.
6. It is the responsibility of each person using compressed air/gas to inspect the cylinders regularly. There should be no signs of defects, rusting or leakage. Any damaged cylinders should not be used.
7. Always take care not to damage the safety and relief valves on cylinders.
8. Never mix air or oxygen with flammable gases except at a burner or in a standard torch.
9. Keep cylinders away from heat sources.
10. Mar empty cylinders and close all valves.
11. Keep cylinders, valves, coupling, regulators and hoses free of oily and/or greasy substances.
12. Do not drop or strike cylinders.
13. Never crack a fuel-gas cylinder valve near a source of ignition.
14. **NO SMOKING!!!!!!!!!!!!!!!**
15. Know your hose colors:
    a. Red = acetylene and other fuel gases
    b. Green = oxygen
    c. Black = inert gases and air

    Flashback arrestors must be installed on all torches!!!

16. Open circuit (no load) voltage of arc welding and cutting machines is to be as low as possible, not in excess of recommended limits.
17. Check the grounding of machine frames and safety ground connections of portable machines often. This prevents accidents.
18. When not in use, remove electrodes from holders.
19. Always shut off electrical power to welders when not in use.
20. Never coil or loop welding cables around your body.
21. Check to see that there is no wear, breaks, etc. in the electrical connections.
22. If necessary, post a fire watch. The Supervisor will advise.
23. When welding, use eye protection. Failure to do so may result in dismissal.
24. Be sure to use adequate ventilation.
25. When welding, use a flash guard or hood.
26. Arc welding and cutting operations shall be shielded by non-combustible or flameproof shields to protect people from arc rays.
27. When electrode holders are left unattended the electrodes must be removed. The holders will be placed as to prevent anyone from making an electrical contact.
28. Either air line respirators or mechanical ventilation will be provided when welding, cutting and/or heating the items below:

a. Coated materials, zinc, mercury, leads, etc. (in closed spaces).
b. Stainless steel (with inert gas equipment)

Air line respirators and/or mechanical ventilation will always b e used in any environment which can cause unsafe accumulations of contaminants and in any and all confined spaces. If respirators or mechanical ventilation is required, the Supervisor will train employees in the proper use and fitting of such equipment. Use of PPE require medical examinations prior to usage.

29. If burning permits are required, the Supervisor will obtain them from the project manager or owner.
30. A fire watch is required when welding, cutting, brazing and/or soldering is performed near combustible materials and/or in locations where fire may develop.
31. When welding or burning in the shop, exhaust units are to be used at all times.
32. All combustible material must be removed or protected by a welding blanket from the place where the flame or arc is to be by 15 feet horizontally or 45 feet below or 10 feet above.
33. When using temporary heaters, a fire watch must be posted for 30 minutes after its use.
34. All employees performing fire watch duties must be adequately trained prior to assignment.

Cylinders

Cylinders must be labeled to comply with Haz-Com program. SDA info is on file in the office and on job sites.

1. Never drop cylinders or allow them to bang together.
2. Always secure cylinders from falling over or sliding.
3. Never move cylinders without a sling.
4. Keep sparks, flames, heat and oil away from cylinders.
5. Keep top areas of cylinders clear at all times so valves can be closed quickly.
6. If you discover a leading cylinder take it into open air immediately and report it.
7. Always keep cylinders away from the immediate area where burning is being done.
8. Do not leave burning equipment on the floor.
9. Never allow cylinders to bump together.
10. Keep path to all cylinders open at all times so cylinders can be closed quickly.
11. Cylinders of compressed gas are to be stored and transported in a position so that the safety relief device is always in direct contact with the vapor space in the cylinders.
12. Cylinders are to be stored and/or transported in a manner to prevent them from creating a hazard by tipping, falling or rolling.
13. All valves are to be closed before a cylinder is moved, when a cylinder is empty and at the completion of each use.
14. No smoking near, at or around cylinders.
15. Oxygen and acetylene cylinders in storage must be separated by 20 feet or a 5-foot-high wall with a half hour fire rating.
16. Fire extinguishers must be provided at all torching and welding operations.
17. Cylinders must be kept at a safe distance from welding, burning and cutting operations.
18. Cylinders must be placed so they do not come in contact with electrical conduits.
19. Do not handle oxygen cylinders or apparatus with oily hands or gloves. This can cause explosions.
20. If an acetylene cylinder is tipped, wait 24 hours after setting upright before using.
21. Visual and other inspections shall be conducted to determine that compressed gas cylinders are in a safe condition.
22. Cylinders must be equipped with the correct regulators. Regulators and cylinder valves should be inspected for

grease, oil, dirt and solvents.

23. Only tools provided by the supplier should be used to open and close cylinder valves.
24. When a cylinder cap cannot be removed by hand, cylinder shall be tagged "Do Not Use" and returned to the designated storage area for return to vendor.

Compressors

1. Be sure compressors are equipped with pressure relief valves and pressure gauges. If they are missing, report it at once. Do not use a compressor that is not equipped with these safety features.
2. Be sure the compressor air intakes are installed so that only clean, uncontaminated air enters the compressor.
3. Air filters must be used on the compressor intake.
4. All persons using compressors must check all safety devices before operating.
5. Never direct compressed air towards a person. Do not used compressed air to clean off clothing.
6. Wear safety goggles or face shields when using compressed air.
7. Compressors shall be operated and lubricated per manufacturer's specifications.
8. All safety devices must be inspected regularly to see that they are in proper working order.
9. Before any repair work is done on the pressure system of the air compressor, the pressure shall be bled off and the system locked out.
10. Obey signs posted on compressors – they will warn you of the automatic starting features if so equipped.
11. Safety cables, also known as whip checks, must be used on couplings of high-pressure hose lines where a connection failure could occur.
12. Spray pots' compressed air pressure must be checked and must not exceed the safe working pressure of the container.
13. When compressed air is used with abrasive blasting equipment, "dead man" controls must be used to activate the blasting hose.
14. Shut the compressor down while filling the fuel tank. Use extra caution when fueling a hot engine.
15. Always ground the fuel nozzle against the filler neck to avoid sparks.
16. Handle all flammable material according to procedures on the container.
17. Refueling operations should be done outdoors. If you must refuel the compressors inside, the area MUST be well ventilated.
18. Avoid spilling fuel. If a spill occurs, clean it up immediately.

WARNING: NEVER SMOKE WHILE FUELING.
THE FUMES IN AN EMPTY CONTAINER ARE EXPLOSIVE!

Portable Generators

A growing number of contractors are using portable generators to operate electrical tools on jobsites. This practice is permitted, under specific conditions, by OSHA standards and the National Electric Coder (NEC).

However, OSHA inspections have revealed a potentially serious hazard resulting from their use. Most of the problems involve misunderstanding the electrical hazards, and an assumption that all generators provide a safe source of power.

All 120V, 2-wire, single-phase 15- and 20-amp receptacles on generators of not more than 5000 watts, "where

the circuit conductors of the generator are insulated from the generator frame and all other grounded surfaces, need not be protected with ground-fault circuit interrupters (GFCI) or an Assured Equipment Grounding Conductor Program [1926.404(b)(I)]. This exception is granted because, with an insulated (isolated) circuit, there is no danger current flow from the generator-fed conductors to ground, structural steel, etc.

If the circuit conductors are not isolated, the shock hazard would be the same as with any other electrical source, and the exemption does not apply.

It should be noted that all dual voltage (120/240V, 3 wire) generators and all generators larger than 5 kw are required by the NEC to have their neutral wire grounded to the frame – which makes it impossible for them to qualify for the exemption. In addition, 120V generators build for export or used in Canada are required to have their neutral wire grounded. Therefore, all dual voltage generators and generators larger than 5 kw must be used with either Ground Fault Interrupters of the Assured Equipment Grounding Program.

Units which have undergone rough use, or which have been repaired by persons not aware of this safety feature may also have host their isolation and will require the same protection.

A qualified person can perform a simple test to determine the integrity of the isolation. Using a continuity tester or ohm meter (with the engine off), check for continuity between the slotted receptacle openings and the generator frame, one at a time. The test will show no continuity (infinite resistance) if the isolation is adequate. Do not use a voltmeter or plug-in tester, since either one is likely to give a false indication.

If you are not sure that the generator (under 5000W) is isolated, or if the generator has an output greater than 5000W GFCIs or an Assured Grounding program must be used. If you have questions, consult a factory service representative. The hazard is serious and can exist in equipment which otherwise appears to be safe and in good condition.

FIRST AID PROGRAM

Purpose

Thurston Mechanical, LLC hereafter referred to as “The Company”, is committed to the safety and health of workers and to ensure prompt medical attention for injuries that occurs at work are managed appropriately.

Scope

This program applies to all workers, visitors, and contractors under company responsibility.

Responsibilities

Employer Responsibilities

Ensure every worker receives training that explains first aid procedures.

Determine who must be trained to render first aid with the appropriate practices and techniques, including response to site-specific hazards.

Ensure the first aid response plan, amount of first aid trained personnel, equipment and all other hazard controls reflect workplace hazards as determined in job hazard analyses and worksite inspections.

Ensure first aid kits remain fully stocked and any emergency response equipment is in good condition.

Worker Responsibilities

Follow the first aid program.

If trained in first aid, render care as needed.

Procedures

First Aid Training

First aid and medical facilities will be made available on site. In the absence of medical facilities there shall be a sufficient number (but not less than one) of workers on each shift certified in first aid and CPR to provide adequate first response medical care.

Each designated first aider will receive training and will have a valid certificate in first aid training from an authorized organization.

First Aid Kits

The Company provides a First Aid Kit on the premises. It is there for worker's use in the treatment of minor scratches, burns, headaches, nausea, etc. All workers shall know the location of the First Aid Kit and shall notify their supervisor if they need to use the First Aid Kit. If a worker has a work related injury or illnesses that requires professional medical assistance, they shall notify their supervisor as soon as possible.

Thurston Mechanical, LLC shall inspect First Aid Kits before the kits are sent out to each job and on a weekly basis to ensure each kit has the required amount of supplies.

Medical Treatment

Non-Emergency Medical Treatment
For non-emergency work-related injuries requiring professional medical assistance, management must first authorize treatment. If a worker sustains an injury requiring treatment other than first aid, they shall:

- Inform their supervisor
- Provide details for the completion of the accident investigation report
- Workers shall use the nearest wash facility or eyewash station in the event a worker accidentally spills or splashes injurious chemicals or liquids on their clothing or body

Emergency Medical Treatment

If a worker sustains a severe injury requiring emergency treatment:

- Injured workers should call for help and seek assistance from a co-worker or supervisor immediately.
- A trained first aid provider will render emergency first aid and request assistance for transportation to the local hospital emergency room or other resources as needed.
- Prior to the start of a job, The Company will ensure that arrangements are in place to transport injured workers from the jobsite to the nearest health care facility.
- The phone number of the ambulance service is to be conspicuously posted and provided to all employees for response to an emergency condition.
- If an ambulance is not available, The Company will ensure other transportation is available to accommodate the injured. This transportation will:

    - Be suitable, considering the distance to be travelled and the types of acute illnesses or injuries that may occur at the work site
    - Protect occupants from the weather
    - Have systems that allow the occupants to communicate with the health care facility to which the injured or ill worker is being taken
    - Be able to accommodate a stretcher and an accompanying person if required

- Provide details for the completion of the accident investigation report.

Excavations

Because many on-the-job accidents are a direct result of inadequate planning, the company has developed the following plan to make excavation work as safe as possible. The Supervisor will be responsible for carrying out the program.

Before beginning a job, our company will be sure these specific site conditions are taken into account:

1. Traffic.
2. Nearness of structures and their condition.
3. Soil type.
4. Surface and ground water.
5. The water table.
6. Overhead and underground obstacles and utilities.
7. Weather.

These and other conditions will be evaluated by job site studies, observations, test borings and consultations with local officials and utility companies. If needed, outside consultants will be brought in.

Before any excavation actually begins, our company will determine the estimated location of utility installations (sewer, telephone, fuel, electric, water lines or any other underground installations) that may be encountered during digging. Also, before starting the excavation our company must contact the utility companies or owners involved and inform them of the proposed work. We will also ask the utility companies or owners to find the exact location of any underground installations. If the exact location cannot be determined, extreme caution must be used.
To find the exact location of any underground installations, all supervisors must use safe and accepted means as required by OSHA, EPA, State and local regulations. If underground utilities are exposed, they must be

removed, protected and/or properly supported during operations.

When all necessary specific information about the job is assembled, we will determine the amount, kind and cost of any safety equipment required. Our company will take a careful inventory of the safety items on hand before deciding if any additional safety measures are required before the job can be started safely.

Before any job begins, the supervisor/owner will review the safety and health program in relation to the particular worksite. This will guarantee adequate procedures and practices which will protect all persons from any hazards. Identification, evaluation and prevention or controls of general workplace hazards, specific job hazards and potential hazards that may arise from foreseeable conditions are a significant requirement of each job site evaluation. The evaluation may be either written or verbal depending on the complexities and inherent hazards associated with each job/site.

To ensure that the policies of our company are implemented effectively, there will be ongoing cooperation among supervisors, employee groups, unions, subcontractors and owners.

Before any job begins the project manager of our company will provide employees who are exposed to public vehicular traffic with warning vests and other suitable garments marked with or made of reflective materials. Supervisor will ensure that such employees wear necessary PPE. Workers will be instructed to remove or make safe any materials or conditions that may cause an accident.
All employees that operate any type of equipment will be properly trained and certified. The project manager and the superintendent will be responsible for checking and enforcing this rule.

Our company will have competent persons on site at all times. Such persons will be identified before any jobs start.

On a daily basis the competent person(s) will inspect excavations and the adjacent areas for possible cave-ins, failures of protective systems and equipment, hazardous atmospheres and conditions. If any hazardous conditions are encountered employees will be removed from the area until all problems are rectified. Inspections will also take place after natural (heavy rains) or man-made events (blasting) that may increase the potential for accidents or injuries.

If a job is large, we may agree to have a full-time safety official who will make recommendations to improve job safety. On smaller operations, the safety person will be a supervisor. In any case, all persons on an active job site will be informed as to who the safety officer is.

Supervisors are the company's representative on a job. They will conduct inspections, investigate accidents and anticipate hazards. The supervisor will ensure that each employee receives on the job safety and health training. They will review and strengthen the overall safety and health procedures to guard against potential hazards, get the necessary work cooperation in safety matters, and will make frequent reports to the owner.

All managers and supervisors will set the example of safety for all job sites. They will wear the prescribed PPE such as safety glasses, hard hats, etc.

Because employees of our company may be exposed to cave-ins, they will be protected by sloping or benching the side of the excavation or supporting the side of an excavation. Placing a shield between the sides of the excavation and the work area may also take place.
If the job so warrants, outside consultants will determine the best protection. All protection will meet OSHA standards. All consultants will be certified and licensed in their field.

Because designing a protective system is complex, the OSHA standards 1926.650, 1926.651 & 1926.625 (subpart P) Appendix A through F provide several types of systems. There are four methods for sloping, four methods for shoring – including the use of shields. All systems are designed to prevent and offer protection against cave-ins.

Another method involves tabulated data, such as table and charts approved by a registered professional engineer. The engineer's report will always be in written form and will include sufficient information to enable the company to make a selection, including the criteria for determining the selection and limits on the use of collected data. One copy of this data along with the identity of the person who approved the data will be kept on the job site. One copy will be in the office of the company and one copy given to the owner. Trench boxes and shields that are approved and designed by an engineer may also be used.

Our company will choose the most practical design approved for each job.

If necessary, confined space procedures will also apply. The supervisor will advise. Rescue operations used in excavation will be those approved in the confined space portion of this manual. Our company will provide support systems such as shoring, bracing or underpinning to ensure the stability of adjacent structures. Based on the OSHA standards, our company will not excavate below the level of base or footing of any foundation or retaining wall unless 1) a support system such as underpinning is provided, 2) the excavation is in stable rock or, 3) a registered professional engineer determines that the structure is sufficiently removed from the excavation and that the excavation will not pose a hazard to anything or anyone. Excavations under sidewalks and pavement are also prohibited unless an approved design support system is provided.

When installing support systems our company will provide for protection of employees by:

1. Securely connecting members of support system.
2. Safely installing support systems.
3. Ensuring that no element of the support systems is overloaded.
4. Installing other structural elements to carry loads imposed on the support system when temporary removal of individual support elements are necessary.

The installation of support systems must be closely coordinated with the excavation of trenches.

As soon as the work is finished the excavation will be backfilled as the protective system is removed. After the excavation has been cleared workers will slowly remove the protective system from the bottom up – taking care to release the elements slowly.

To avoid possible failure of a protective system our company will ensure that: 1) all materials are free from damage and defects, 2) manufactured materials and equipment are used and maintained in a manner consistent with the recommendations of the manufacturer and in a way that will prevent employees exposed to hazards and, 3) while in operation, damaged material and equipment are examined by a competent person to determine if they are suitable for continued use. If not, they will be removed at once.

In addition to cave-ins, other hazards include exposure to falls, falling loads, and mobile equipment. To protect all employees of our company the supervisor will take the following precautions:

1. Keep material or equipment that might fall or roll into excavation at least 2 feet from the edge of excavations, or have retaining devices, or both.

2. Provide warning systems such as mobile communications, barricades, hand or mechanical signals or stop logs, to alert operators of the edge of an excavation.
3. Provide scaling to remove loose rock or soil or install protective barricades and other equivalent protection to protect employees against falling rock, soil or material.
4. Prohibit employees from working on faces of sloped or benched excavations at levels above other employees – unless the lower levels are adequately protected from hazards originating on the upper levels.
5. Prohibit employees from working, walking or standing under loads that are handled by lifting or digging equipment.

To avoid being struck by any spillage or falling materials, employees are required to stand away from vehicles being loaded or unloaded.

No one from our company will work in standing water at any time. All water will be removed from the excavation before the supervisor will allow anyone to enter.

If the excavation is deeper than 4 feet, the air will be monitored by a competent person. If respirators are used, all aspects of the company's respirator safety program will be followed.

On excavations deeper that 4 feet must have safe means of egress and access. This includes ladders, steps, ramps or other means of safe egress. They will be within 25 feet of lateral travel. If structural ramps are used, they will be designed by a competent person. Structural members used for ramps and runways must be uniform in thickness and joined in a manner to prevent tripping or displacement.

Excavations deeper than 4 feet as well as ones where hazardous atmosphere or oxygen deficiency could reasonable be expected to exist will be tested by a competent person before anyone is allowed to enter.

If hazardous conditions exist, controls such as proper respiratory protection and/or ventilation will be provided. Also, controls to reduce atmospheric contaminants must be tested regularly. Excavations that have adverse conditions, or where such conditions may arise will be provided with emergency rescue equipment.

Ladders

1. Ladders used by the company's employees must meet OSHA/ANSI specifications.
2. All ladders should be in good condition, joints between steps and side rails tight, all hardware and fittings securely attached and moveable parts should be operated freely without binding or undue play.
3. Ladders shall not be loaded beyond the maximum intended load for which they were built, nor beyond the manufacturer's rated capacity.
4. Ladders must have non-slip safety feet.
5. Keep ladder rungs and steps free of grease, dirt and oil.
6. Never place a ladder in front of doors opening toward the ladder except when door is blocked, locked or guarded.
7. Never place a ladder on boxes, books, boards, barrels or other unstable bases to obtain additional height.
8. Always face ladder when ascending and descending.
9. NEVER use a ladder that is broken, has missing steps or rungs or has broken side rails.
10. Do not use the top of a stepladder as a step.

11. Never use metal ladders near electrical equipment.
12. Never use a ladder except for its intended purpose.
13. Extension ladders must extend 36” above landing.
14. Extension ladders must always be secured.
15. When using extension ladders, use the four to one ratio. Place the ladder so that its feet are ne foot away from what it leans against for every four feet in height.
16. Never use a ladder for a horizontal walk plank or scaffold.
17. Provide solid footing for ladders on soft grounds.
18. Never lean a ladder against unsafe or unstable objects.
19. When using ladders to access high places, the ladder must be securely lashed to prevent slipping.
20. Hold side rails with both hands when ascending or descending a ladder. If material must be handled, raise or lower it with a rope.
21. Never slide down a ladder.
22. Be sure shoes are clean and dry when working on ladders.
23. Never climb higher than the third rung from the top of straight or extension ladders, or the second tread from the top of step ladders.
24. An inspection must be performed before each use to ensure that ladders are in good condition.
25. Never separate an extension ladder to use its sections as straight ladders.
26. Ladder rungs, cleats, and steps shall be parallel, level, and uniformly spaced, when the ladder is in position for use. Rungs, cleats, and steps of portable ladders (except as provided below) and fixed ladders (including individual-rung/step ladders) shall be spaced not less than 10 inches (25 cm) apart, nor more than 14 inches (36 cm) apart, as measured between center lines of the rungs, cleats, and steps. Rungs, cleats, and steps of step stools shall be not less than 8 inches (20 cm) apart, nor more than 12 inches (31 cm) apart, as measured between center lines of the rungs, cleats, and steps. Rungs, cleats, and steps of the base section of extension trestle ladders shall not be less than 8 inches (20 cm) nor more than 18 inches (46 cm) apart, as measured between center lines of the rungs, cleats, and steps. The rung spacing on the extension section of the extension trestle ladder shall be not less than 6 inches (15 cm) nor more than 12 inches (31 cm), as measured between center lines of the rungs, cleats, and steps. The minimum clear distance between the sides of individual-rung/step ladders and the minimum clear distance between the side rails of other fixed ladders shall be 16 inches (41 cm). The minimum clear distance between side rails for all portable ladders shall be 11 1/2 inches (29 cm). The rungs of individual-rung/step ladders shall be shaped such that employees' feet cannot slide off the end of the rungs. The rungs and steps of portable metal ladders shall be corrugated, knurled, dimpled, coated with skid-resistant material, or otherwise treated to minimize slipping.

Scaffolding

All scaffolding must be erected, dismantled and/or moved under the supervision of a qualified person. A competent person must inspect the scaffolding daily for defects or damage. All people working on, near or around scaffolding will be trained by a competent person as to proper usage. Proper scaffolding training is included in the annual safety training and includes fall protection, electrical safety, falling object protection, scaffold use and load capacity.

1. A competent person must ensure scaffolds are safe prior to use. Unsafe equipment or conditions must be tagged out and complied with.
2. Scaffolds shall be erected on sound, rigid footing capable of carrying the maximum load to be encountered.
3. Scaffolding is not monkey bars. Do not climb or play on them.

4. Scaffolds and their components shall be capable of supporting at least four times the maximum intended load. This will prevent collapse.
5. Guardrails and toe boards shall be installed on all open sides and ends of platforms more than ten feet above the floor or ground – except for "needle beam" scaffolds and floats. Scaffolds shall have standard guardrails installed on all open sides and ends of platforms.
6. There shall be a screen, with maximum of ½ "openings, between the toe board and the mid-rail when persons are required to work or pass under the scaffolding.
7. All planking shall be scaffold-grade as recognized by grading rules for the species of wood used.
8. Scaffold planning shall be overlapped a minimum of 12 inches and secured from movement.
9. Scaffold planks shall extend over their end supports not less than 6 inches, not more than 12 inches.
10. All scaffolding and accessories shall be free of defects. Any defective material will be replaced at once.
11. If scaffolding is rented, follow the instructions provided by the rental agents regarding set-up, weight limits, etc.
12. A tag line should be used when raising or lowering materials.
13. Treated or protected fiber rope shall be used when corrosive chemicals are nearby.
14. Never use unstable materials for support of scaffold frames or planks. The footings shall be sound, rigid and capable of carrying the maximum load without moving.
15. All scaffolding components are to be kept in good condition.
16. Access ladders must be permanently installed as part of any scaffolding.
17. Never move or alter scaffolding when in use or occupied.
18. Never use scaffolding that is damaged or in need of repair.
19. Never work on a scaffold during storms, rain, ice, snow, high winds or lightning.
20. Keep tools and materials in an orderly state so as not to create a hazard.

OSHA requires fall protection on scaffolding at 10 feet (subpart L). Some clients may require more stringent requirements. Our company will always follow the more stringent requirement.

Elevated Work Platforms

Elevated work platforms come in two types:

Type A:

A self-propelled or manually propelled platform which is raised or lowered vertically by a powered scissor or telescoping hydraulic cylinder.

Type B:

A vehicle-mounted or self-propelled platform that has an extendable boom and/or bucket.

The operator of either of these platforms will be an employee trained in this position by a qualified instructor. The operators must all be certified. It is the responsibility of the management to provide this training. The operator will conduct daily inspections of equipment. The operator will follow the manufacturer's guidelines at all times.

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

The certified capacity of a platform must not be exceeded.

Employees must stand on the floor of the platform. There will be no sitting, standing or climbing on the edge of the basket.

If employees are working on a Type B platform, they must wear safety belts tied off to a line – which is attached to the work platform.

If an employee is working on an elevated platform and must leave the platform or basket:

1. A supervisor must approve the need.
2. A safety harness with a lanyard, hardhat and safety glasses must be worn.
3. The tie harness must be attached to a stationary, independent support, NOT the work platform.
4. When returning to the platform, the same steps must be followed.

If overhead work is being done in an area where there is traffic or activity near the base of the platform, a watchman must be posted, or the area must be cordoned off with appropriate barricades marked with signs and/or lights.

Scissor and Man Lifts

1. Know the capacity and operating characteristics of aerial platforms. Do not overload platforms.
2. Inspect the machine before each use as specified by the manufacturer.
3. Check the jobsite area for hazards that may cause the lift to tip over.
4. Check the path of travel – above, below and all around for hazards.
5. Maintain specified distances from electrical power lines and other electrical hazards.
6. Keep others away from the platform's work area.
7. Wear a harness/safety harness, lanyard and/or tie off if required for the type of platform being used.
8. Never modify or remove any part of the equipment unless authorized by the manufacturer.
9. If the machine is left unattended, lower the platform, shut off the engine, engage parking brake and remove key.
10. Always wear a hard hat.

If you are prone to dizziness or seizures or are bothered by heights, you cannot use elevated equipment.

The supervisor will check, at the beginning and end of each shift, all elevated equipment to ensure that it is in safe working order. There will be a written daily inspection log that will be kept on the equipment at all times. In addition, there may be additional inspection records kept in the company office.

Respirators

All employees potentially exposed to airborne contaminants must wear respiratory protection.
Peter D Thurston, the Safety Director, is the respiratory program administrator and will conduct evaluations to determine when and what type of respirators must be used, if any. Hazards will be identified, and NIOSH certified respirators will be selected and provided based on those hazards and factors affecting performance.
All sites requiring use of respirators will have a properly trained outside standby person. Mandatory equipment must

include SCBA or SAR with auxiliary air supply and appropriate retrieval equipment or equivalent rescue means. Thurston Mechanical and its employees will not work on sites that have IDLH conditions (Immediately Dangerous to Life and Health Limits).

OSHA requires medical evaluations be performed on employees prior to performing certain tasks. Other standards require employers to monitor employees' health while working in particular fields. There is a wide assortment of equipment to protect workers from respiratory hazards – this equipment can range from dust masks to self-contained breathing apparatus. Breathing apparatus is usually divided into two categories: air purifying and supplied-air respirators.

Air-purifying Respirators:

These devices purify the air drawn through them. There are two basic types of air-purifying respirators:

1. Mechanical Filter – this type removes solid particles such as dust, fumes and mists. Different grades of filters are available to meet specific needs.
2. Chemical cartridge filters – these are designed to filter out specific compounds that may be encountered.

Special training is required for the use of respirators. Operators required to use respirators must be medically cleared for such devices by a licensed medical entity. Training must be given to all persons required to use respirators. See the company's complete Respirator Safety manual for specific criteria, rules and regulations.

No one may use a respirator without the written permission of a licensed health care professional. These written permission forms are filed at the office and are available upon request.

All employees trained in the use of a respirator will be asked to sign a document stating that they are aware of the proper use and limitation of any breathing equipment being used.

Management is responsible for regular inspection of breathing equipment and training of operators.

Management is responsible for determining which jobs will require use of respiratory equipment. Management will ensure that the correct breathing equipment will be selected and used for any job requiring such equipment.

General Safety Rules for Respirator Use

1. Facial hair is prohibited when using half-mask respirators. Facial hair can inhibit the seal required between facial skin and the masks.
2. Ordinary eyeglasses cannot be used with full-face respirators because glasses with temple bars or straps that pass through the mask will inhibit proper sealing.
3. Glasses or goggles can be worn with half-mask respirators.
4. Because facial deformities (scars, deep skin creases, severe acne, etc.) can prevent a respirator from sealing properly, employees with such conditions may be prohibited from performing work that requires the use of respirators.
5. Employees must leave the respirator use area if they detect vapor or gas breakthrough, changes in breathing resistance, or leakage of the facepiece.

General Rules for Fit Testing

Each user must receive fitting instructions including demonstrations and practice sessions in donning respiratory equipment. This will include the proper methods for determining proper fit and adjusting the equipment to achieve proper fit.
The effectiveness of proper fit can be tested in two ways: Qualitatively and Quantitatively.

Qualitative Fit Testing – Involves the introduction of a harmless odorous or irritating substance into the breathing zone around the respirator being worn. If no odor or irritation is detected – a proper fit is indicated.

Quantitative Fit Testing – this method offers the most accurate and detailed information on respirator fit. It involves the introduction of a harmless aerosol to the wearer while he/she is in a test chamber. While the wearer performs exercises that could induce faceplate leakage, the air inside and outside the faceplate is measured for concentrations of the harmless aerosol inside the faceplate.

General Rules for Cleaning, Storage and Maintenance of Breathing Equipment

All respirators must be inspected for wear and deterioration of their components before and after each use. Each respirator check must include a check of the tightness of all connections.

SCBA's must be inspected at least monthly. Air and oxygen cylinders must be fully charged according to manufacturer's specifications. Regulators and warning devices must be checked and functioning properly prior to use.
Chemical cartridges and gas mask canisters should be replaced as necessary to provide adequate protection. Mechanical filters must be replaced as necessary to avoid high resistance breathing.

Repairs to breathing equipment must be made only by experienced persons using parts specifically designed for each respirator.

A respirator that has been used must be cleaned and disinfected before each use. Emergency rescue equipment must be cleaned and disinfected immediately after each use. Written records must be kept of inspection dates and any findings.

Respirators must be stored in a manner that protects them from dust, sunlight, heat, extreme cold, excessive moisture and/or damaging substances. Protection against any physical damage should also be provided. Respirators must be stored in a position so that seals and faceplates are not distorted into abnormal shapes that will prevent the devices from sealing properly when used.

Respirators may be washed in a detergent solution and then sanitized by immersion in sanitizing agent. Such materials must be selected with caution and adhere to manufacturer's specifications.

OSHA requires a site-specific written program for each job site requiring the use of respirators.

Confined Spaces

The term confined space means a tank, vessel, silo, vault, ditch, pit, open-topped space more than 4 feet deep, pipe line, duct, sewer or tunnel having:

- Limited means of egress and/or
- Not designed for continuous employee occupancy

- Less than 19.5% oxygen
- Flammable/combustible/explosive atmospheres present or likely to enter into area
- Areas not protected against water, gas, sand, gravel, ore, grain, coal, biological or radioactive substances which could harm, trap and/or suffocate people
- Poor ventilation
- Restrictive entry points in regard to rescue personnel

Hazards that may be present in confined spaces include, but are not limited to:

- Oxygen deficiencies
- Flammable/explosive/combustible atmospheres
- Toxic gases
- Physical hazards and/or obstacles
- Corrosive substances
- Biological agents
- Electrical hazards
- Rodents, snakes, spiders and other wild life
- Poor lighting
- Wind
- Exposure to dangerous weather conditions
- Insecure footing

When jobs require employees to work in confined places, the company will take steps to protect your health by having qualified persons assist in planning, safety testing and training.

All confined spaces will be evaluated for all safety hazards and have precautionary and remedial processes implemented before any employees are required to enter.

The supervisor must check any confined space for harmful gases and make sure that oxygen levels are safe. The supervisor will obtain the proper permits before anyone enters a confined space. The permit will be posted conspicuously if the job duration is longer than one shift.

When checking for air purity the supervisor will use a calibrated monitoring device to be sure that the oxygen level is 19.5% or greater and that toxic and/or combustible gas levels are at or below acceptable standards as defined by OSHA. The space will also be checked to confirm that all available air ports are open and functioning to increase fresh air flow. A person will be posted outside the confined space(s) to monitor all entry and exits. The supervisor is required to have any necessary rescue equipment on hand should persons inside the confined space need assistance. Monitoring of the space will inform all entrants of the potential hazards and results; all entrants must participate in the permit review and signing. Ventilation must be used and testing must be conducted before entry and during work.
Employees, or their representatives, are entitled to request additional monitoring at any time.

There will be no smoking within or adjacent to confined spaces. The supervisor will instruct all persons entering the confined space as to all safety regulations and explain the alarm system which will indicate any unsafe conditions. This alarm system may include audible tones and/or flashing lights. If the alarm is activated all persons must exit the space immediately.

The supervisor will ensure that all employees are wearing all appropriate Personal Protection Equipment, including lifelines and harnesses before entering the confined space.

All personnel will know the hazards of entry. The entrant will properly use equipment, communicate with the attendant, alert the attendant of unsafe conditions, and exit the space when a hazardous condition develops. The attendant will monitor entrant behaviors, maintain a head count of entrants, remain outside the entry point, ensure the permit is posted, communicate with entrants, order evacuations, and summon rescue. Method and contact for summoning rescue will be listed on the permit. The entry supervisor will verify atmospheric monitoring, ensure hazards identified are mitigated, verify rescue service availability, remove unauthorized personnel, and terminate the entry when appropriate. If anyone must enter the space to perform rescue operations an additional person must be posted outside. The rescuer will have an approved respirator, lifeline and harness.

In the event that multiple contractors are present during confined space operations, Thurston Mechanical LLC requires an inter-company supervisory meeting to coordinate all safety procedures, permitting and hazard mitigation to ensure safety of all parties on site.

Because of the inherent risks associated with working in confined spaces, it is required that at least one person on site knows CPR and first aid. This person must remain in the area as long as people are inside the confined space – and is NOT to be inside the confined space working. This person will be identified to all employees and the general contractor.

Due to the risk of fire and explosion, if the confined space contains or did contain combustibles, all residues including dry scare or sediment must be removed. If this is not possible, they must be covered with a non-combustible blanket.

Each and every person will be trained in the proper use of harness, lifelines, respiratory equipment and monitoring devices before entering a confined space. Records are kept of all training. The training record includes employee name, trainer signature/initials and dates of training. Training records are available to employees and their authorized representative(s).

Many job sites may require additional barriers/barricades to prevent unauthorized entry into a confined space Thurston Mechanical LLC will provide pedestrian, vehicle, or other barriers as necessary to protect entrants from external hazards. This may include, but is not limited to, the following methods: set-up cones, post signs, partition-off the area with caution tape, erect barricades, arrange for traffic control. All permit- required confined spaces should be marked with signs.

Attendants may NOT monitor multiple confined spaces.
Rescue services will be:

1. Provided by the host facility, or

2. Provided by an outside service which is given an opportunity to examine the entry site, practice rescue, and decline as appropriate.

Rescue services must be on-site when conditions immediately dangerous to life and health (IDLH) exist within an occupied confined space.

Thurston Mechanical LLC will adhere to all client procedures for terminating confined space permits and closing out after job completion.

Thurston Mechanical LLC will complete an annual review of the confined space permit program, using the canceled permits retained for 1 year after each entry and revise the program as necessary, to ensure that employees are protected. Note: If no entry is performed during a 12-month period, no review is necessary.

NOTE: in the unlikely event that the air is not pure enough for breathing, all employees will be required to wear self-contained breathing equipment. All aspects of the company's Respiratory Safety Program will apply.

Asbestos and Lead Policy

Asbestos

Our company will not perform any work which involves the disturbance or removal of material covered in or manufactured out of asbestos. If an employee finds themselves in an area where there is danger of exposure to asbestos, they should leave the area immediately. It is our policy to only perform work in areas that have been abated of all asbestos by qualified persons/contractors.

Lead

Our company does not perform lead abatement work. We are qualified as a company to do renovations and repairs where lead may be present. The scope of the work allowed and the precautions that must be taken are covered in greater depth in the separate Lead Safety Manual. Lead awareness training is required before initial assignment in areas where lead is suspected and annual refresher training is conducted for all employees during the annual safety training.

Employees who are working in areas where Lead and/or Asbestos may come in contact with signs such as:

DANGER
Contains Asbestos Fibers and/or Lead.
Avoid creating dust!
Cancer and Lung Disease Hazard

Any such indications of the presence of Lead and/or Asbestos should be heeded.

Spill and Release Prevention

It is the policy of our company to comply with all EPA and OSHA standards concerning any spills and/or releases. Should a spill occur, report it at once to the supervisor and jobsite foreman. The supervisor and foreman will advise on how the spill should be contained. They will also inform the general contractor and/or owner.

A proper spill kit must contain the appropriate supplies for materials that may be spilled. Supplies must be easily accessible when required, and considerations must be made for both the type and quantity of materials.

General Rules:

1. All Safety Data Sheets (SDS) are kept on jobsites. The supervisor will inform employees as to their locations. In case of an emergency, dial 911 and give them the information on the SDA (including the

1-800 phone number provided by the manufacturer), an estimate of how much has been spilled, and the location of the spill.
2. All hazardous materials are to be removed from jobsites daily. Dispose of empty containers properly.
3. In any emergency, DIAL 911
4. Always use proper safety precautions and follow all manufacturer's recommendations when handling hazardous materials.

In order to minimize the likelihood of spills, it is necessary to visually inspect all containers for any type of leakage or damage before bringing them into a jobsite. The supervisor will be responsible for ensuring that all hazardous materials are removed from site at the end of each day. All employees will be instructed as to the proper handling methods for any substances they use while working.

Areas where chemicals may be used or stored must be maintained using good housekeeping and best management practices. This includes, but is not limited to, clean and organized storage, labeling, and secondary containment where necessary.

If a spill or leak does occur and it is possible to minimize its severity by closing valves, shutting down equipment for moving a container, it should be done immediately. In the vent of a large spill or leakage, or if your skin, eyes or clothing becomes contaminated, leave the area immediately. Wash eyes, skin and clothing per manufacturers recommendations. Always notify supervisor as soon as a spill or leak occurs.

All hazardous waste must be disposed of according to local and federal regulations. This includes excess paint and solvents.

Hazard Communications Program (HAZ-COM)

Introduction:

This program is in compliance with the GHS as required by OSHA.

Our company has developed a hazard communications program to enhance the safety and health of our employees.

As a concerned employer, our company intends to provide information about chemical and other hazardous substances and the control of such hazards through a comprehensive hazard communications program, which includes container labeling, safety data sheets (SDS) and employee information and training.

The following program outlines how we will accomplish these objectives:

1. **Container Labeling** – This responsibility has been assigned to Supervisors. To further ensure that all employees are aware of the hazards associated with materials being used on jobs, it is our policy to label all containers. The Supervisor for each job will ensure that all containers are labeled with either an extra copy of the original manufacturers' labels or with generic labels that have space for all required information. Prior to starting work on any unlabeled pipe, vat, vessel or container, our employees are to contact their Supervisor to obtain the following information:

    - The substance in the pipe, vat, vessel or container

- Potential hazards
- Safety precautions that need to be taken

It is the policy of our company that no container of hazardous substances will be released for use until the following label information has been verified:

- Contents of containers are clearly labeled
- Appropriate hazard warnings are noted (Health and Physical Hazards)
- The name, address and telephone number of the manufacturer is listed

2. **Safety Data Sheets (SDS)** – Copies of SDS for all hazardous substances to which employees may be exposed are kept in the main office and/or job site if applicable. The safety coordinator will be responsible for obtaining and maintaining the data sheet program for the company.

    - The coordinator will review incoming data sheets for new and significant health/safety information. All new information will be communicated to employees.
    - All SDS's will be reviewed for completeness. If SDS's are deemed to be incomplete, a complete SDS will be obtained from the manufacturer. OSHA must be notified sf the manufacturer does not comply. SDS's must be available to all employees in the work area for review.

3. **Employee Information and Training** – Employees are required to attend a health and safety orientation set up by the Supervisor prior to any job. The meeting will cover the following topics:

    - An overview of the requirements contained in the hazard communication program
    - Inform employees of any work areas that may contain hazardous materials
    - Location and availability of the written hazardous communication program
    - Physical and health effects of the hazardous substances
    - Methods and observation techniques used to determine the presence or release of hazardous substances in the work area
    - How to learn or prevent exposure to hazardous substances through usage of engineering controls, work practices and/or protective equipment
    - Emergency and first aid procedures to follow if employees are exposed to hazardous substances
    - How to read and interpret SDS's

It is critically important that all employees understand all safety training. If you have any questions or require additional information, please contact the safety coordinator.

List of Hazardous Substances

- A list of all known hazardous substances used in the work area will be posted in either the work site office, the gang boxes or the storage facility. Employees will always be informed as to its specific location.

Hazardous Non-routine Tasks – Periodically employees are required to perform hazardous non-routine tasks. Prior to beginning such a task, each affected employee will be given information by their supervisor regarding potential hazards and appropriate safety measures.

Informing Other Contractors – To ensure that other contractors work safely in our work areas, the coordinator and/or Supervisor will inform them of all hazardous materials present and all safety precautions required.

Potential Hazardous Chemicals List

Acids
Battery fluids
Cleaning agents
Degreasing agents
Flammables
Thinners
Greases
Herbicides
Lead
Pesticides
Process chemicals
Strippers
Wood preservatives
Adhesives
Benzene
Coal tar pitch
Dusts
Foaming resins
Toners
Industrial oils
Lye
Shellacs
Aerosols
Catalysts
Coatings
Fiberglass
Fuels
Inks
Oxalic acid
Resins Soldering
Agents
Varnishes
Xylene
Asbestos
Caustic agents
Detergents
Etching agents
Fungicides
Insecticides
Sealants
Solvents
Water treatments
Janitorial supplies
Plastics
Gases

Determining if a Substance is Hazardous

The responsibility for determining whether a substance is hazardous lies solely with the manufacturer. As a company we must rely on information received from manufacturers and suppliers through labels and SDS's.

Chemicals considered to be hazardous are:

- Those regulated by OSHA in 29 CFR Part 1910, subpart Z
- Those included in the American Conference of Governmental Industrial Hygienists (ACGIH) latest edition of threshold limit values for chemical substances and physical agent in the work environment.
- Those found to be or suspected to be carcinogens by the National Toxicology Program in its Annual Report on Carcinogens, or by the Internal Agency for Research on Cancer in their latest edition of *Monographs*.

Common Chemical Categories

The following section provides general information regarding many classes of chemicals typically encountered in contracting operations:

SOLVENTS

Examples – alcohol, mineral spirits, trichloroethylene, turpentine, xylene, toluene, benzene

FORM
Generally liquid
HAZARDS
Toxic, irritant, corrosive, carcinogen, flammable
COMMON ROUTES OF ENTRY
Inhalation and/or skin absorption
ACUTE EFFECTS
May cause headache, dizziness, drowsiness, irritation to skin, eyes, nose, throat and lungs
CHRONIC EFFECTS
May cause damage to lungs, liver, blood, kidney, skin, eyes, central nervous system and digestive tract, may cause canter
POSSIBLE EXPOSURES
Paint thinners, cleaners, degreasers, adhesives
SYMPTOMS OF EXPOSURE
Skin irritation, dry skin, dermatitis, coughing, wheezing, stomach irritation, nausea and diarrhea

PAINTS

Examples – enamel, lacquer, polyurethane, varnish, epoxy, sealants and caulking, liquid, vapor, spray mist, gel

HAZARDS

Toxic, irritant, carcinogen, flammable

COMMON ROUTES OF ENTRY
Inhalation, skin absorption, ingestion
ACUTE EFFECTS
Respiratory tract irritation, anesthetic effects, dizziness, asphyxiation, weakness, fatigue, nausea, headache, wheezing, coughing, shortness of breath
CHRONIC EFFECTS
May damage lungs, liver, blood, kidneys, skin, eyes, central nervous system, digestive tract, short-term memory, may cause cancer
POSSIBLE EXPOSURE
Brush or spray paint application, caulking, sealing
SYMPTOMS OF EXPOSURE
Skin irritation, dry skin, dermatitis, coughing, wheezing, stomach irritation, nausea and diarrhea

ACIDS

Examples – Hydrochloric (muriatic), hydrofluoric, sulphuric, etc.

FORM
Liquid, granular, gas, vapor
HAZARDS
Skin irritation, dry skin, dermatitis, coughing, wheezing, stomach irritation, nausea and diarrhea, corrosive, reactive, oxidizing agent
COMMON ROUTES OF ENTRY
Inhalation, skin absorption, ingestion
ACUTE EFFECTS
Burns, irritation of skin, nose, eyes, respiratory tract, pulmonary edema, gastrointestinal damage
CHRONIC EFFECTS
Blindness, permanent tissue damage, permanent respiratory and gastrointestinal damage
POSSIBLE EXPOSURE
Cleaners, batteries, corrosive substances
SYMPTOMS OF EXPOSURE
Skin irritation, dermatitis, burns, respiratory and gastrointestinal irritation

CAUSTICS

Examples – alkalis, calcium chloride, ammonium hydroxide, sodium hydroxide, lime, sodium silicate, concrete products

FORM
Liquid, powder, gas, vapor

HAZARDS
Skin irritation, dry skin, dermatitis, coughing, wheezing, stomach irritation, nausea and diarrhea, corrosive, water reactive, burns
COMMON ROUTES OF ENTRY
Inhalation, skin absorption, ingestion
ACUTE EFFECTS
Burns and skin irritant, eye and respiratory tract irritation
CHRONIC EFFECTS
Blindness, permanent tissue damage, permanent respiratory and gastrointestinal damage
POSSIBLE EXPOSURE
Cleaners, cement, plaster, bleaches, drain cleaners
SYMPTOMS OF EXPOSURE
Skin irritation, dermatitis, burns, respiratory irritation, permanent tissue damage

FLAMMABLES

Examples – acetone, gasoline, benzene, acetylene, propane, paints, thinners, mineral spirits

FORM
Liquid, gas, solid
HAZARDS
Fire, explosion, toxic, irritant, carcinogen

COMMON ROUTES OF ENTRY

Inhalation, skin absorption, ingestion

ACUTE EFFECTS

Irritant to skin, eyes, nose, throat and lungs. If ignited – burns

CHRONIC EFFECTS

Damage to lungs, liver, blood, kidneys, skin, eyes, central nervous system, digestive tract, short term memory.

POSSIBLE EXPOSURE

Oils, degreasers, solvents, cleaners, fuels

ADHESIVES

SYMPTOMS OF EXPOSURE

Irritation of skin or eyes, respiratory tract, dermatitis, nausea, headache

GASES

Examples – Oxygen, acetylene, nitrogen, propane, carbon dioxide, chlorine, methane, hydrogen, phosgene, carbon monoxide, ozone

FORM

Liquid, gas

HAZARDS

Toxic, oxidizing agent, flammable, combustible, asphyxiant

COMMON ROUTES OF ENTRY

Inhalation

ACUTE EFFECTS

Irritation of eyes, nose, throat, lungs, skin, central nervous system

CHRONIC EFFECTS

Damage to eyes, nose throat respiratory tract, central nervous system, lungs, liver, kidneys, pulmonary edema

POSSIBLE EXPOSURE

Fuels, degreasers, exhausts, welding and cutting

SYMPTOMS OF EXPOSURE

Headaches, nausea, dizziness, drowsiness, coughing, chest pain, respiratory irritation, asphyxiation

INSECTICIDES AND HERBICIDES

Examples – Creosote, fluorides, arsenic compounds

FORM

Liquid, gas, granular, solid, gel

HAZARDS

Toxic, irritant, poisonous, carcinogenic

COMMON ROUTES OF ENTRY

Inhalation, ingestion, skin absorption

ACUTE EFFECTS

Irritation to skin, respiratory tract, central nervous system and respiratory damage, rashes, burns

CHRONIC EFFECTS
Skin disease, keratosis, lung damage, kidney damage
POSSIBLE EXPOSURE
Pest and insect control products
SYMPTOMS OF EXPOSURE
Fatigue, muscle twitches, difficulty breathing, vomiting, weakness, respiratory irritation

METAL FUMES

Examples – iron, aluminum, copper, lead, mercury, cadmium, steel, magnesium, zinc, nickel

FORM
Fumes
HAZARDS
Toxic
COMMON ROUTES OF ENTRY
Inhalation of fumes and dust
ACUTE EFFECTS
Metal fume fever, asthma, pulmonary edema
CHRONIC EFFECTS
Irritation and damage to lungs, respiratory tract, central nervous system, kidney damage, liver damage
POSSIBLE EXPOSURE
Welding, cutting, soldering and grinding of metals
SYMPTOMS OF EXPOSURE
Metallic taste in mouth, fatigue, weakness, nausea, dryness of nose and mouth, aches and pains

DUST AND FIBERS

Examples – wood, concrete, silica, lime, gypsum, fiberglass, asbestos, metals

FORM
Dust and fibers
HAZARDS
Irritant, toxic, carcinogenic, flammable, explosive
COMMON ROUTES OF ENTRY
Inhalation
ACUTE EFFECTS
Irritation of the nose, throat, respiratory tract, eyes, skin
CHRONIC EFFECTS
Lung disease, may cause cancer
POSSIBLE EXPOSURE
Wood cutting or sanding, insulation, chipping, mixing, cleaning, sand blasting
SYMPTOMS OF EXPOSURE
Coughing, itching, irritation

DEFINITION OF TERMS

Toxic Substance
Any substance that can cause acute or chronic injury to the human body, or which is suspected of being

able to cause disease or injury.

Corrosive

A chemical that causes visible destruction of, or irreversible alterations in living tissue by chemical action

Irritant

A chemical that is not corrosive, but causes a reversible inflammatory effect on living tissue by chemical action at the site of contact

Flammable

Liquids, solids or gases that will readily ignite and when ignited will burn so vigorously as to create a serious fire hazard

Incompatible

Materials that could cause dangerous reactions by direct contact with other materials

Reactive

Unstable materials that may change chemically during handling or storage. May also mix with other chemicals to create violent reactions

Sensitizer

A substance that causes the development of an allergic reaction upon repeated contact

Reproductive Toxin

A substance that affects either male or female reproductive systems and may impair the ability to have children

Carcinogen

Substances or agents capable of causing or procuring cancer

Teratogen

Substances or agents, exposure to which by a pregnant woman can result in malformations of a fetus

Mutagen

Substances or agents capable of altering the genetic material of living cells

Nephrotoxin

Substances or agents capable of causing injury to the kidneys

Neurotoxin

Materials that affect the nerve cells and may produce emotional or behavioral abnormalities

PEL

(Permissible Exposure Level) 8-hour OSHA Mandatory

TLV

(Threshold Limit Value) recommended maximum 8-hour exposure levels established by the ACIA

STEL

(Short Term Exposure Level) 15-minute exposure in 8 hours

SKIN

Readily absorbed through the skin

Silica Safety Program

OUR SAFETY PROGRAM WHEN DEALING WITH SILICA, TO FIRST DO ENGINEERING CONTROLS, ADDED TO OUR PPE PROGRAM.

WE EDUCATE OUR EMPLOYEES ON THE DANGERS OF SILICA AS PART OF OUR ANNUAL HAZ-COM "RIGHT TO KNOW" TRAINING.

OUR EXPOSURE COMES FROM MASON AND SITE WORK. WE WILL USE TABLE ONE, NO EXCEPTIONS.

PROTECT YOURSELF

Silicosis is caused by exposure to respirable crystalline silica dust. Crystalline silica is a basic component of soil, sand, granite, and most other types of rock, and it is used as an abrasive blasting agent. **Silicosis** is a progressive disabling, and often fatal lung disease. Cigarette smoking adds to the lung damage caused by silica.

Effects of Silicosis

- Lung cancer – Silica has been classified as a human lung carcinogen.
- Bronchitis/Chronic Obstructive Pulmonary Disorder.
- Tuberculosis – Silicosis makes an individual more susceptible to TB.
- Scleroderma -a disease affecting skin, blood vessels, joints and skeletal muscles.
- Possible renal disease.

Symptoms of Silicosis

- Shortness of breath; possible fever.
- Fatigue; loss of appetite.
- Chest pain; dry, nonproductive cough.
- Respiratory failure, which may eventually lead to death.

Sources of Exposure

- Sandblasting for surface preparation.
- Crushing and drilling rock and concrete.
- Masonry and concrete work (e.g., building construction and repair).
- Cement and asphalt pavement manufacturing.

Preventing Silicosis WHEN DOING MASON WORK:

- Use water sprays, wet methods for cutting, chipping, drilling, sawing, grinding, etc.
- Use respirators approved for protection against silica if needed.
- Do not eat, drink or smoke near crystalline silica dust.
- Wash hands and face before eating, drinking or smoking away from exposure area.

SILICA PROGRAM

Exposure assessments will be conducted for those employees who are expected to be exposed to respirable crystalline silica at or above the action level.

When required, respirators will be provided to employees who are exposed to respirable crystalline silica.

Housekeeping measures must be used to limit exposure to respirable crystalline silica including but not limited to HEPA-filtered vacuuming, wet sweeping, wetting, and other techniques.
Compressed air cannot be used to clean clothing or surfaces where doing so could contribute to employee exposure to respirable crystalline silica.

Thurston Mechanical LLC maintains an exposure control plan which is available to all employees upon request. This plan is evaluated at least once per year and as necessary. Situations where reevaluation may be necessary include regulatory updates, changes in equipment, and exposure incidents. Any changes resulting from this process will be communicated to affected employees.

Scope – Paragraph (A) of the Standard

The standard applies to all occupational exposures to respirable crystalline silica in construction work, except where employee exposure will remain below 25 ug/m3 as an 8-hour TWA under any foreseeable conditions. Exposures to respirable crystalline silica occur when the following tools are used on concrete, brick, block, stone, mortar, and other materials that contain crystalline silica:

- Stationary masonry saws
- Handheld power saws
- Walk-behind saws
- Drivable saws
- Handheld grinders
- Walk-behind milling machines and floor grinders

Where Employee Exposure Will Remain Below 25 ug/m3 as an 8-hour TWA

The standard does not apply where employee exposure will remain below 25 ug/m3 as an 8-hour TWA under any foreseeable conditions. The phrase “any foreseeable conditions” refers to situations that can reasonable be anticipated. OSHA considers failure of engineering controls to be a situation that is reasonably foreseeable. Although engineering controls are usually a reliable means for controlling employee exposures, equipment does occasionally fail. Thus, the standard applies where exposures below 25 ug/m3 as an 8-hour TWA are expected or achieved, but only because engineering controls are being used to limit exposures.

TO STAY BELOW THE LIMIT OF 25 MICROGRAM PER CUBIC METER OF AIR OVER AN 8 HOUR PERIOD, OUR COMPANY WILL USE ONLY WET POWER TOOLS. THIS WILL ELIMINATE ALL AIR SILICA IN THE AIR. THE ENTIRE WORK AREA WILL BE KEPT WET, INCLUDING THE AREA BELOW THE CUTTING AREA.

OUR COMPANY WILL ALSO FOLLOW THE RECOMMENDATIONS OF Appendix a & b of 1926.1153.

Employee exposure can reasonably be anticipated to remain below 25 ug/m3 as an 8-hour TWA when performing certain tasks that involve only minimal exposure to respirable crystalline silica.
Such tasks include:

- Mixing concrete for post holes
- Pouring concrete footers, slab foundations and foundation walls
- Removing concrete formwork

When these tasks are performed in isolation from tasks that generate significant exposures to respirable crystalline silica, the standard does not apply. These examples are not exclusive, and there may be other tasks that involve exposure under 25 ug/m3 as an 8-hour TWA under any foreseeable conditions.

Some employees in the construction sector perform tasks involving occasional, brief exposures to respirable crystalline silica that are incidental to their primary work. These workers include carpenters, plumbers, and electricians who occasionally drill holes in concrete or masonry or perform other tasks that involve exposure to respirable crystalline silica. Where employees perform tasks that involve exposure to respirable crystalline silica for a very short period of time, exposures for many tasks will be below 25 ug/m3 as an 8-hour TWA. For example, for hole drillers using hand-held drills, if the duration of exposure is 15 minutes or less, the 8-hour TWA exposure can reasonably be anticipated to remain under the 25 ug/m3 threshold (assuming no exposure for the remainder of the shift), and the standard would not apply.

This exception for situations where exposures are not likely to present significant risk to workers allows employers to focus their resources on exposures of greater occupational health concern.

A medical surveillance program will be established for employees who are exposed to the action level of 8-hour TWA of 25µg/m³ of respirable crystalline silica. A baseline medical assessment must be available to exposed employees within 30 days of initial assignment unless they have previously received a suitable medical examination in the past three years. This applies to employees who would be required to wear a respirator more than 30 days per year or who are exposed to action level respirable crystalline silica for more than 30 days per year. A suitable prescreen that meets the same requirements is also acceptable.

All employees who are exposed to action level respirable crystalline silica at or above the action level (8-hour TWA of 25µg/m³) will be provided with training. The training ensures that employees covered by the written exposure control plan can demonstrate knowledge and understanding of the health hazards associated with respirable crystalline silica, the specific tasks in the workplace that could result in exposure to respirable crystalline silica, the specific measures taken to protect employees from exposure to crystalline silica, the contents of the respirable crystalline silica rule, and the purpose of the medical surveillance program.

Accurate records of all air monitoring data, objective data, and medical surveillance shall be maintained as required by regulations.

Personal Protection Equipment (PPE)

Protective equipment, including personal protective equipment for eyes, face, head, and extremities, protective clothing, respiratory devices, and protective shields and barriers, must be provided, used, and maintained in a sanitary and reliable condition. All PPE will be supplied by Thurston Mechanical LLC at no cost to employees. Employees CANNOT use their personal protection equipment. Each job will undergo a hazard assessment to determine PPE requirements.

The workplace is assessed to determine if hazards are present, or are likely to be present, which necessitate the use of personal protective equipment. If such hazards are present, or likely to be present, employees will be provided with the types of PPE that will protect the affected employee from the hazards identified in the hazard assessment. All PPE will properly fit each employee. The hazard assessment shall be certified by the person who completed the hazards assessment and the date the assessment was completed.

All PPE must be inspected for deficiencies prior to use. Any defective or damaged PPE will not be used. PPE that is in disrepair must be discarded or removed from service until repaired.

1. Protective goggles or face shields are provided. These must be worn when there is any danger of flying particles or corrosive material.
2. ANSI approved safety glasses with side shields must be worn at all times where there is risk of eye injury such as punctures, abrasions, contusions or burns. These must be ANSI Z.87.
3. Protective gloves and face shields are provided to use against cuts, chemicals and burns.
4. ANSI approved hard hats must be worn where there is danger of falling object. Be sure there are no cracks or any type of damage to your hat. Fit it to your head properly. Hard hats must be worn at all times in a hard hat posted area.
5. ANSI approved work shoes must be worn both in the shop and on job sites. No exceptions. It is a requirement that all employees have approved work shoes.
6. Some jobs may require the use of safety belts and harnesses.
7. Job specific hearing protection will be provided to all employees.

Our company will train all employees in the correct usage of all PPE used in the shop and on jobs.

PPE Training

The training for all PPE will meet OSHA, Federal, state and/or Local standards as well as insurance standards and EPA. Training will be provided by Thurston Mechanical as well as by qualified professionals in the field. Retraining will be performed as necessary.

Hearing protection training will be provided to all employees annually. Between these annual meetings, ongoing safety programs will be provided.

Gloves are used mainly in welding, burning or painting. The Supervisor will provide the proper training including determining what type of gloves should be used for each job. Manufacturers and/or suppliers will be asked to give training sessions as well.

Protective goggles or face shields will be provided. These must be worn when there is any danger of flying particles or corrosive materials. Different types of eye protection are:

- Safety Glasses
- Full Face Shields
- Cover Goggles
- Cup Goggles
- Splash Resistant Goggles
- Dust Goggles

No one will be permitted to wear contact lenses while doing any painting or paint related work. Paint, fumes, vapors, etc. could react negatively with the contact lens material creating serious eye problems. All safety glasses will meet ANSI standard Z87.1

Work Clothes

1. Pants will not be so long as to create a tripping hazard.
2. Long sleeve shirts are recommended because they offer greater protection against skin contact from hazardous materials.
3. Leather footwear with reinforced soles or inner soles of flexible metal are recommended for any construction site. These must be ANSI approved if used.
4. Poor fitting, loose or badly worn or frayed clothing, bracelets, necklaces, scarfs, jogging shoes, tennis shoes, or open toed shoes are not allowed on any job site.

Housekeeping

Poor housekeeping is the main contributor to accidents. Keep your work area clean. Help your fellow workers keep their area clean as well. Get rid of all rubbish by placing in appropriate containers. Keep exits open and free of debris. Make sure flammables are properly used and stored. In the event of an emergency, know where all exits are located.

1. Be sure your work area is properly lit. If you can't see, you could get hurt. Replace any lights that are not working.
2. Keep restrooms clean and sanitary. (Toilets sinks and floors).
3. Keep all work areas clean and neat. There is no one to pick up after you except you.
4. Work surfaces must be kept dry and slip-resistant.
5. Spills must be cleaned up at once. Do not wait for someone else to do it.
6. Keep combustible scrap, debris and waste stored away from work area.
7. Keep oil and paint-soaked waste in metal waste cans with covers. Keep covers on containers.
8. Keep aisles and passageways clear at all times.
9. Be sure there is safe clearance for walking in aisles where motorized or mechanical equipment is operated.
10. Be sure no sharp projections are in walkways.
11. Make sure there is adequate headroom provided wherever people need to walk.
12. Never walk behind a vehicle that is running. The driver may not see you and you could be run over.

As we have discussed throughout this program, good housekeeping is the easiest way to prevent accidents. The management, office personnel and supervisors will ensure that the company offers a safe, clean environment.

In the field, the Supervisor will make sure that the jobsite is both clean and orderly. At any jobsite there are

people from various companies – it is everyone's duty to maintain a safe, clean environment.

The Supervisor will be directly responsible to the project manager/owner to carry out a housekeeping plan.

All waste or left over material will be brought back to the shop where the shop Supervisor will properly and legally dispose of it. If waste cannot be brought back to the shop, the Supervisor will follow the instructions of the project manager, General Contractor or owner as to where to dispose of paper, cardboard, metals, paints, thinners, glass and plastic.

Any and all containers will be labeled as to their contents and purpose. Remember, if it is not drinking water, it will be in double containers to avoid accidents.

Many accidents occur on the jobsite because several trades are working at once. Remember to keep your tools, toolboxes, and all work-related equipment in its proper place. Be considerate of others.

Combustible scrap and debris shall be removed at regular intervals. Covers shall be provided for containers used for flammable or harmful substances.

All passageways and stairways will be kept clear. No exceptions!

Remember, good work habits and a neat jobsite are essential for job safety and efficiency. You are expected to keep your workplace well organized. Materials are to be in good order at all times. Employees shall report any unsafe conditions to the Supervisor immediately. When possible, employees should correct unsafe conditions themselves when they are discovered.

Toolbox and Jobsite Safety Meetings

Toolbox safety meetings are required. When these are given, we want your input. If you don't understand – ASK! If you disagree, don't be afraid to say so. If you have a suggestion, share it at the meeting. Let the company know of any topics you would like discussed.

In addition to toolbox safety meetings, jobsite safety meetings will be conducted weekly to ensure that employees are receiving information which will enable them to work safely. The Supervisor will oversee the meetings.

All employees are urged to bring up any topics regarding safety. The Supervisor will address any concerns at once. Attendance is mandatory for all weekly safety meetings.

Jobsite Inspections

The Supervisor is responsible for checking the jobsite before the inspection begins. The Supervisor will meet with the job superintendent to discuss all aspects of the job.

This inspection will be carried out daily before work begins. Any unsafe condition will be noted by the Supervisor and corrective action taken before work begins or resumes. This document will be turned into the job superintendent or safety coordinator as well as being kept on file in the company office.

Accident Investigation and Reporting

Various accidents and injury reports and records are necessary to meet the requirements of governmental agencies, insurance companies, project managers and owners. If an accident does occur, it will be necessary to fill out the proper documentation.

The company needs to know the actual or assumed cause of every accident – no matter how minor. This will greatly assist in our ability to prevent similar accidents from reoccurring.

Our company will conduct an investigation. Evidence if available must be collected and preservred. The data will not be given to unauthorized agencies. Copies will go, as required, to Worker's Compensation agents, Insurance agents, jobsite manager and owners. Copies may be kept in an employee's personnel record.

Thurston Mechanical will keep a complete medical log. This log will be used to record all injuries and illnesses whether the employee was treated on site or off site at a doctor's office, hospital or clinic. Training will be provided to personnel in their responsibilities and incident investigation techniques. The shop manager is responsible for reporting all accidents at the shop, the jobsite Supervisor is responsible for reporting incidents at jobsites. All recordable illnesses or injuries must be recorded on the OSHA 300 Log within seven calendar days of receiving information that the injury occurred

An OSHA 300 log must be posted each year, from
February 1 to April 30.
This log must be kept for 5 years.
All OSHA 300 logs are completed and signed by an authorized company executive
in the manner mandated by OSHA.
The annual OSHA 300A summary is posted in the conference room at:
961 Lyell Ave Rochester, NY 14606
The OSHA 300A Summary will be signed by a company official

Investigating an accident is a responsibility of all levels of management and the concern of all employees. However, the Jobsite Supervisor has a unique position which gives them special responsibility for this function. The Supervisor therefore must:

1. Be sure that all employees receive prompt first aid for all injuries.
2. Take any action to minimizes the extent of loss to both the employees and the property when an accident occurs.
3. Correct the causes of all minor injuries/accidents.
4. Investigate and report findings and recommendations by completing accident reporting forms.
5. Immediately notify by telephone the company president, jobsite supervisor and owner of any serious accident.
6. Interview those involved in any accident as well as any witnesses.
7. Record and keep all reports and documentation.
8. Preserve physical evidence, if any.
9. Required incidents must be reported to applicable regulatory agency(s) within 8 hours of their discovery. Incidents must also be reported to the client as soon as possible, or in a timely manner (within 24 hours of incident)

All accidents, no matter how minor, will be reviewed with all employees at the end of each working day – this will help others to avoid similar occurrences.

Fall Protection

A site-specific fall protection plan shall be prepared by a qualified person for each job.
If controlled access zones are not utilized, 100% tie off is required.

Thurston mechanical LLC will provide for prompt rescue of employees in the event of a fall or will assure the employees are able to rescue themselves.

Incident investigations will be conducted to evaluate the fall protection plan for potential updates to practices, procedures or training in order to prevent reoccurrence.

Subpart M requires 100% fall protection at 6 feet unless covered by another standard. Two of the many examples of exception to the 6-foot rule are:

1. Scaffolding, Subpart L, requires fall protection at 10 feet and
2. Steel Erection, Subpart R, requires fall protection at 15 – 30 feet.

Keep in mind that owners and general contractors may have different and more stringent requirements than OSHA. Always check these requirements with the safety coordinator of the company you are working for.

DO NOT CONFUSE THE OWNERS' FALL PROTECTION REQUIREMENTS WITH OSHA REGULATIONS. THE TWO MAY DIFFER SUBSTANTIALLY!!

In all cases, the more stringent regulations must be followed.

Our company is responsible for work that must be done 6 feet or more above the lower level. **Peter D. Thurston** is the "competent person" whose sole responsibility is to identify fall hazards and institute a fall protection plan. Our company is responsible for overseeing the proper use of all elevating equipment.

Peter will inspect all equipment for any defects or damages and report any flaws. Employees will use equipment only in accordance with manufacturers' specifications and recommendations and must wear appropriate PPE.

Fall Protection:

1. Workers on walking/working surfaces 6 feet or more above lover levels shall be protected from falling in accordance with OSHA 1926 Subpart M.
2. Fall protection systems must be provided and installed when required, before work begins.
3. Employees who may be exposed to fall hazards must receive certified training.

Fall Protection Systems:

The following Fall Protection Systems specified are acceptable methods for protecting from fall hazards:

- Guard Raid Systems

  Top rail – height of the top rail to the walking/working surface must be 42" +/- 3" tolerance, (39"-45"). Top rail must be able to withstand a 200 lb. force without failure or deviating to lower than 39 inches.

  Intermediate Structural Members – A midrail must be half way between the walking/working surface and the top rail. Paneling, screening and vertical members, if used, must extend from the walking/working surface to the top rail. The maximum spacing for vertical members is 19" on center. Midrails must be able to withstand a 150 lb. force without failure.

  Materials – A variety of materials may be used for guard rail construction as long as the strength and height requirements are met. The following restrictions apply:

  1. The minimum diameter of the material must be 14".
  2. No plastics or metal banding is allowed.
  3. If manila, plastic or synthetic rope is used, it must be inspected often to ensure it maintains its strength and height requirement.
  4. Wire rope must be flagged with high-visibility material at 6-foot intervals.

  Special Applications – Removable guard rails may be used at hoist ways through the wall or to facilitate material handling. Offset guard rails must be installed at ladder way openings.

  Personal Fall Arrest Systems

  Anchorage Points – Anchor points must be capable of supporting 5000 lbs. per employee. Anchor points must be independent of any anchorage used to support suspended platforms.

  Body Support – Body harnesses are the preferred equipment for the body. Harnesses spread the impact forces to portions of the body better able to withstand it and allow a body to be suspended upright while waiting for rescue.

  Connectors – Connectors must be drop-forged, formed metal or another equivalent metal. They must be corrosion resistant, have smoothed edges and a 5000 lb. tensile strength – proof tested to 3400 lbs. Snap hooks must be the locking type to prevent accidental disengagement.

  System Activation

  Arresting forces – The arresting forces applied to the body during deceleration must be limited. The maximum arresting forces are as follows:

  1. 900 lb. for a body belt
  2. 1800 lb. for a body harness

  Fall Distances – The system must be rigged so that a body cannot fall farther than 6 feet or come in contact with any lower level. The maximum deceleration distance to stop a body is 3.5 feet.

Lanyards & Vertical Life Lines – Lanyards and vertical life lines must have a minimum breaking strength of 5000 lbs.
Horizontal Life Lines – Horizontal life lines must be designed, installed and used under the supervision of the company, with a safety factor of two.

Positioning Device Systems

Anchorage Point – Anchor points must be capable of supporting 3000 lbs. per person, or two times the maximum impact load.

Connectors – Connectors must be drop-forged, formed metal or another equivalent metal. They must be corrosion resistant, have smoothed edges and a 5000 lb. tensile strength – proof tested to 3600 lbs. Snap hooks must be of the locking type.

Inspection – The system must be inspected prior to each use for wear, damage and deterioration. Defective components must be removed from service. If the system is impact loaded, it must be immediately removed from service until repaired or deemed suitable.

Warning Line Systems

Installation – Erect around all sides of the working surface 6 feet from the edge. When mechanical equipment is used, it must be kept back 10 feet from the edge in the direction of travel. Erect line 34" to 39" above the walking/working surface.

Materials – Stanchions must be weighted or secured to resist a 16 lb. tip-over force. Lines may be made of rope, wire or chain and must have a 500 lb. tensile strength and be flagged for visibility.

Access Path – Points of access, storage and hoist areas must connect to the work area by a path formed by two warning lines.

Controlled Access Zones

Control Line – A control line restricts access to leading edges and other operations. When used, install as follows and adjust as work progresses:

1. Leading edges – within 6 feet to 25 feet.
2. Bricklaying – within 10 feet to 15 feet.
3. Precast erection – 6 feet to 60 feet.

Installation – erect line 39" to 45" above walking/working surface. Extend and enclose the entire length of the unprotected edge.

Materials – Stanchions must be weighted to resist tip-over. Lines may be made of rope, wire or chain and must have a 200 lb. breaking strength and be flagged for visibility.

Protections from Falling Objects

Protection – The type of protection needed will depend on the height of the materials. Toe boards must

be 3 ½ " high and capable of withstanding a 50 lb. force. Paneling and screening can extend up to the midrail or top rail. Canopies must be strong enough to prevent collapse and prevent penetration by falling objects.

Duty to Have Fall Protection

General – Determine that the surface that people will work on has the strength and structural integrity to support them safely.

When exposure to falling objects exists – employees MUST wear hard hats and erect guardrail systems with toe boards, paneling or screening, or erect a canopy and keep objects away from edges, or barricade area.

Material Handling/Manual Lifting

Handling and storing materials involve all employees. At one time or another everyone handles materials. This can involve almost anything. It could be hoisting material with a crane, driving a truck with paint on it, using a wheelbarrow, and hand truck or manually carrying anything. Manual lifting equipment such as dollies, hand trucks, lift-assist devices, jacks, carts, hoists is provided for employees at all job sites. Lifting equipment should be used in lieu of manual lifting whenever possible.

Workers frequently cite the weight and bulkiness of objects being lifted as a major cause for injury. In addition, workers can be injured by falling objects, improperly stacked material and all types of equipment.

Before manual lifting is performed, a hazard assessment must be completed. The assessment must consider size, bulk, and weight of the object(s), if mechanical lifting equipment is required, if two-man lift is required, whether vision is obscured while carrying and the walking surface and path where the object is to be carried.

When manually moving material, workers should be aware of potential injuries – including the following:

1. Strains and sprains from improperly lifting and carrying loads that are either too large, too heavy, or both.
2. Fractures and bruises caused by being struck by materials or being caught in pinch points.
3. Cuts and bruises caused by falling materials that have been improperly stored, or by incorrectly cutting ties or other securing devices.

Whether moving materials manually or mechanically, employees must be aware of the dangers involved and must be trained in correct methods.

1. If the material is so bulky that it cannot be moved or handled safely by one person – get help.
2. When placing blocks under raised loads always ensure that the load is not released until all hands and other body parts are clearly removed from under the load. Blocking material shall be large enough and strong enough to support the load. Never use materials that show signs of cracks, wear, etc.
3. Handles and holders shall be attached to loads to reduce the chances of fingers or hands getting caught. Workers will wear appropriate PPE.
4. When materials are being moved mechanically, avoid overloading the equipment by following manufactures' spec. Always take into consideration the shape, size and weight of materials. The equipment ratings must be on the machine and never be exceeded.

5. When using a powered industrial fork truck, the load must be centered on the forks. All operators will be trained according to the ANSI Standard for forklift training. Extra weight must not be placed on the truck. If equipment with roll-over protection, do not remove. If any original components of a fork truck are missing do not use the truck! Always ride with the load in the lowest position possible when in motion. All stacked loads shall be correctly piled and cross-tiered when possible.
6. Stored material shall not create a hazard. Storage areas must be kept free of debris at all times. Storage areas must be kept clean so that rodents and wild life do not infest. Always take into consideration a materials height and width when stacking.
7. All bound material shall be stacked, placed on racks, blocked, interlocked and otherwise secured to prevent it from sliding, falling or collapsing.
8. When stacking material, always observe height limits. For example, lumber may be stacked no more than 16 feet high if it is handled manually, or 20 feet high if handled mechanically.
9. Used lumber must have all nails removed before stacking. Lumber must be stacked and leveled on solid supporting bracing. Each stack should be solid and self-supporting.
10. Stacks of loose bricks shall not be more than 7 feet in height. When these stacks reach a height of 4 feet, they must be tapered back 2 inches for every foot of height above 4 feet.
11. When masonry blocks are stacked higher that 6 feet, the stacks shall be tapered back ½ block for each tier above the 6-foot level.
12. Bags and bundles will be stacked in interlocking rows to remain secure. Bagged material will be stacked by stepping back the layers and cross-keying the bags at least every 10 layers. To remove bags from the stack, start from the top row and work down.
13. Baled paper and rags stored inside a building must not be closer than 18" to walls, partitions or sprinkler heads.
14. Boxed material will be banded or held in place using cross-ties or shrink wrap.
15. Drums, barrels and kegs must be stacked symmetrically. When stored on their sides, the bottom tiers must be blocked to prohibit rolling. When stacked on end, put planks, sheets of plywood dunnage or pallets between each tier to make a firm, flat stacking surface. If the materials are two or more tiers high, the bottom tier must be chocked on each side to prevent shifting.
16. If using material that cannot be safely stacked due to size, shape or fragility, use bins or shelves.
17. Structural steel, bar stock, pipe and other cylindrical shaped objects, unless stored in racks, must be stacked and blocked to prevent spreading or tilting. Pipes and bars will not be stored in racks that face main aisles or work areas.

Regardless of how you use or handle materials, always consult your safety director for proper instructions and/or training. Never perform an operation if you have questions as to the safe and proper method.

Supervisors periodically evaluate work areas and employees' work techniques and assesses the potential for and prevention of injuries. New operations will be evaluated to eliminate hazards before work processes are implemented.

Annual safety training includes general principles of ergonomics, recognition of hazards and injuries, procedures for reporting hazardous conditions and methods and procedures for early reporting of injuries. When warranted, job specific training will be given on safe lifting and work practices, hazards, and controls.

The investigation of injuries caused by improper lifting will be performed. Any findings will then be incorporated into work procedures to avoid future injuries.

Cranes and Rigging

Only trained and licensed persons can operate cranes. This is both a NY State Law and an OSHA requirement. It is up to the safety coordinator and/or foremen to enforce this law.

Operators will know the material they are lifting and its weight. Operators will know the rated capacity of the cranes they operate. Manufacturers' instructions and load capacities must be followed at all times. No signs/placards are to be removed from any crane. Load rating charts must be posted in the cab of each crane. Always use extreme caution when in the vicinity of electrical lines.

All employees working near or on a crane will be trained as to the special hazards associated with this type of equipment.

If outriggers are required, they, must be used on firm, level ground or on timbers that are sufficiently cribbed to spread the weight. This will prevent the crane from tipping.

All cranes must be inspected daily by the licensed operator and yearly or as required by the state and federal regulations. A copy of daily inspections will be kept on the crane, available for inspection, at all times.

A copy of the Crane Safety Program, Haz-Com Program, Fire Extinguisher and First Aid Kit will also be kept in the cab of all cranes at all times.

Hoisting Chains and Ropes

Hoisting chains and ropes must be free of kinks or twists and must never be wrapped around a load. Loads shall be attached to the load hook by slings, fixtures or other devices that have the capacity to support the load on a sling. Sharp edges of loads will be padded to prevent cutting of the slings. Proper sling angles shall be maintained sot that the slings are not loaded in excess of their capacities.

Rigging equipment not in use shall be removed from the immediate work area so as not to present a hazard to employees.

All persons working near/with cranes will be trained in the proper use of hand signals.

Slings

Employees using slings must be sure that the slings are visually inspected before each use and during operation. This is especially important if they are used under heavy stress. Riggers and/or others knowledgeable in sling use will conduct or assist in these inspections. All damaged or defective slings will be removed from service at once. Slings will not be shortened with knots or bolts or other makeshift devices.

Sling legs that have been kinked will not be used. Slings will never be loaded beyond their rated capacity – according to manufacturers' instructions.

Suspended loads will be kept clear of all obstructions. Crane operators will avoid any sudden stops and starts when moving suspended loads. All employees will remain clear of loads that are to be lifted and suspended. The rest will be blocked off to keep employees and other people away from the crane "swing area" and the lifting area.

All shock loading is forbidden.

Hooks on overhaul ball assemblies, lower load blocks, or other attachment assemblies shall be of a type that can be closed and locked, eliminating the hook throat opening. Alternatively, an alloy anchor type shackle with a bolt, nut and retaining pin may be used.

Fork Lifts

All employees using fork trucks, platform lift trucks, motorized hand trucks, tow motors and/or other specialized industrial trucks – powered by electrical or other motors – will be trained in their proper operation. All workers using these vehicles will be trained by the safety director to be aware of fire protection, pedestrian safety, design, maintenance and proper operation. The training content includes forklift operating instructions, use of controls, capacity and load stability. Mandatory refresher training shall be provided to the operator 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, and/or the operator has received an evaluation that reveals that the operator is not operating the truck safely.

Equipment shall be examined before being placed in service. Examination shall be made at least daily and noted in the inspection log located on each piece of equipment. Where industrial trucks are used on a round-the-clock basis, they shall be examined after each shift. Defects when found must be immediately reported and corrected.

All powered industrial trucks (except those intended primarily for earth moving or over the road hauling) will meet all requirements of ANSI B56.1 standards. All trucks will also have a label or some other identifying mark indicating the acceptance by a recognized testing laboratory. Modifications and additions will not be performed. There are 11 types of industrial trucks/tractors. The safety director will train employees on the types used by the company.

Operators must be evaluated by the safety director and retrained as needed at least every 3 years. Documentation of all training must be kept. All trainers must meet OSHA's trainers' requirements. Drivers must pass both a written and driving test.

Seat belts must be worn at all times.

Heat and Cold Illnesses

Construction workers are often exposed to hazards relating to weather. Exposure to extremes in temperature can cause illness and even death.

Under the general duty clause, OSHA can cite the employer for failing to take measurers to limit or control these hazards.

Heat Stress

There are 4 environmental factors that effect the amount of stress a worker faces in a hot work

environment; temperature, humidity, radiant heat and air velocity. Additional factors that can contribute to a person's sensitivity to these factors are; age, health, weight, fitness, medication, etc.

Heat disorders fall into 5 broad categories; heat stroke, heat exhaustion, heat cramps, fainting and heat rash.

To prevent heat stress, the following precautions should be taken:

1. Engineering Controls – These will include general ventilation and spot cooling by fans. Providing shielding or shade, if practical, is also advised. If you feel too hot, you are encouraged to go to any shade available and rest until you feel sufficiently cooled. Adequate supplies of drinking water will be supplied at all jobsites.
2. Work Practices – During hot weather, stop often for breaks. If you have any medical conditions that may be aggravated by elevated temperatures, notify your Supervisor.
3. Alternating – By alternating work and rest periods, heat stress can be reduced or eliminated. If at any time you feel dizzy or weak, at once and rest in a cool place until the feeling passes. Heavy work will be scheduled during the coolest parts of the day whenever possible.
4. Acclimatization – One way to adjust to the heat is to work for short periods of time, gradually building up to longer periods of work. Employees who have never worked in heat may have up to a 5-day period to adjust.
5. Education – Employees must be aware of the need to replace body fluids, to rest and to recognize symptoms of heat stress.

Cold Related Illnesses

Cold temperatures can also pose health risks. The temperature does not have to be below freezing to cause hypothermia. Frostbite is also a real danger of prolonged exposure to cold temperatures.

In cold and/or damp weather, employees should wear layers of cotton, wool, silk or other natural fiber clothing. These keep the body warmth in and can be removed layer by layer if you become too warm. Shoes should be water-proofed. Hats and gloves should be worn. Ears should be covered. In extremely cold environments, face masks may be needed.

Frostbite – Frostbite is the freezing of body parts exposed to cold. Severity can depend on the air temperature, length of exposure and wind speed. Frostbite can cause the loss fingers, toes, hands, arms, etc. If you feel cold, go to a warm area, drink a warm beverage if available, take a break and warm up. If you think you have frostbite, go to the nearest emergency room.

Hypothermia – Hypothermia occurs when the body loses its ability to keep itself warm. Hypothermia can be fatal if not treated. Drugs that interfere with the body's normal response to cold temperatures (alcohol, prescription medicines and over-the-counter medicines) can mask symptoms that hypothermia is occurring. Any medical condition that impair circulation, such as diabetes or heart disease can increase the likelihood of hypothermia occurring. Wearing wet clothing on a cold, windy day can also lead to hypothermia. If you even think you may be developing hypothermia, go immediately to the nearest emergency room.

Exposure Control Plan

Thurston Mechanical, LLC is committed to providing a safe and healthful work environment for our entire staff. In pursuit of this goal, the following exposure control plan (ECP) is provided to eliminate or minimize occupational exposure to bloodborne pathogens in accordance with OSHA standard 29 *CFR* 1910.1030, "Occupational Exposure to Bloodborne Pathogens."

PROGRAM ADMINISTRATION

■ Peter D Thurston is responsible for implementation of the ECP. Peter D Thurston will maintain, review, and update the ECP at least annually, and whenever necessary to include new or modified tasks and procedures. Contact location/phone number:
961 Lyell Ave. Rochester, NY 14606 585-254-4410

■ Those employees who are determined to have occupational exposure to blood or other potentially infectious materials (OPIM) must comply with the procedures and work practices outlined in this ECP.

■ Peter D Thurston will provide and maintain all necessary personal protective equipment (PPE). Peter D Thurston will ensure that adequate supplies of the aforementioned equipment are available in the appropriate sizes.
Contact location/phone number: 961 Lyell Ave. Rochester, NY 14606 585-254-4410

■ Peter D Thurston will be responsible for ensuring that all medical actions required by the standard are performed and that appropriate employee health and OSHA records are maintained.
Contact location/phone number: 961 Lyell Ave. Rochester, NY 14606 585-254-4410

■ Peter D Thurston will be responsible for training, documentation of training, and making the written ECP available to employees, OSHA, and NIOSH representatives.
Contact location/phone number: 961 Lyell Ave. Rochester, NY 14606 585-254-4410

METHODS OF IMPLEMENTATION AND CONTROL

Universal Precautions

All employees will utilize universal precautions.

Exposure Control Plan

Employees covered by the bloodborne pathogens standard receive an explanation of this ECP during their initial training session. It will also be reviewed in their annual refresher training. All employees can review this plan at any time during their work shifts by contacting Peter D. Thurston. If requested, we will provide an employee with a copy of the ECP free of charge and within 15 days of the request.
Peter D. Thurston is responsible for reviewing and updating the ECP annually or more frequently if necessary to reflect any new or modified tasks and procedures that affect occupational exposure and to reflect new or revised employee positions with occupational exposure.

Workplace Hygiene
Handwashing facilities are identified at each job site prior to work commencing.
If provision of handwashing facilities are not feasible, then an appropriate antiseptic hand cleanser in conjunction with cloth/paper towels or antiseptic towelettes will be provided to all employees.

All equipment or environmental surfaces shall be cleaned & decontaminated after contact with blood or other infectious materials.

Where the eyes or body of any person may be exposed to injurious corrosive materials, suitable facilities shall be provided within the work area.

Personal Protective Equipment (PPE)
PPE is provided to our employees at no cost to them. Training in the use of the appropriate PPE for specific tasks or procedures is provided by Peter D. Thurston.
The types of PPE available to employees are as follows:
Gloves, eye protection, respirators, face masks, protective clothing as warranted
PPE is located in job site work boxes as well as 961 Lyell Ave Rochester, NY 14606 and may be obtained by any employee as needed or required.
All employees using PPE must observe the following precautions:
■ Wash hands immediately or as soon as feasible after removing gloves or other PPE.
■ Remove PPE after it becomes contaminated and before leaving the work area.
■ Used PPE may be disposed of in designated job site and shop receptacles.
■ Wear appropriate gloves when it is reasonably anticipated that there may be hand contact with blood or OPIM, and when handling or touching contaminated items or surfaces; replace gloves if torn, punctured or contaminated, or if their ability to function as a barrier is compromised.
■ All contaminated PPE (excluding respirators) must be discarded after use
■ Never wash or decontaminate disposable gloves for reuse.
■ Wear appropriate face and eye protection when splashes, sprays, spatters, or droplets of blood or OPIM pose a hazard to the eye, nose, or mouth.
■ Remove immediately or as soon as feasible any garment contaminated by blood or OPIM, in such a way as to avoid contact with the outer surface.
The procedure for handling used PPE is as follows:
discard disposable items. Respirators must be wiped down with isopropyl alcohol before and after use. Used filter cartridges must be discarded and replaced with new cartridges.

POST-EXPOSURE EVALUATION AND FOLLOW-UP
Should an exposure incident occur, contact Peter D Thurston at the following number 585-254-4410.
An immediately available confidential medical evaluation and follow-up will be conducted by nearest Urgent Care or hospital facility.
Following initial first aid (clean the wound, flush eyes or other mucous membrane, etc.), the following activities will be performed:
■ Document the routes of exposure and how the exposure

occurred.
■ Identify and document the source individual (unless the employer can establish that identification is infeasible or prohibited by state or local law).
■ Obtain consent and make arrangements to have the source individual tested as soon as possible to determine HIV, HCV, and HBV infectivity; document that the source individual's test results were conveyed to the employee's health care provider.
■ If the source individual is already known to be HIV, HCV and/or HBV positive, new testing need not be performed.
■ Assure that the exposed employee is provided with the source individual's test results and with information about applicable disclosure laws and regulations concerning the identity and infectious status of the source individual (e.g., laws protecting confidentiality).
■ After obtaining consent, collect exposed employee's blood as soon as feasible after exposure incident, and test blood for HBV and HIV serological status
■ If the employee does not give consent for HIV serological testing during collection of blood for baseline testing, preserve the baseline blood sample for at least 90 days; if the exposed employee elects to have the baseline sample tested during this waiting period, perform testing as soon as feasible.

ADMINISTRATION OF POST-EXPOSURE EVALUATION AND FOLLOW-UP

Peter D Thurston ensures that the health care professional evaluating an employee after an exposure incident receives the following:
■ a description of the employee's job duties relevant to the exposure incident
■ route(s) of exposure
■ circumstances of exposure

PROCEDURES FOR EVALUATING THE CIRCUMSTANCES SURROUNDING AN EXPOSURE INCIDENT

Peter D Thurston will review the circumstances of all exposure incidents to determine:
■ engineering controls in use at the time
■ work practices followed
■ a description of the device being used (including type and brand)
■ protective equipment or clothing that was used at the time of the exposure incident (gloves, eye shields, etc.)
■ location of the incident
■ procedure being performed when the incident occurred
■ employee's training

If revisions to this ECP are necessary Peter D. Thurston will ensure that appropriate changes are made.
(Changes may include an evaluation of safer devices, adding employees to the exposure determination list, etc.)

EMPLOYEE TRAINING

All employees who have occupational exposure to bloodborne pathogens receive initial and annual training conducted by a third party, hired by Thurston Mechanical to conduct annual safety training.

All employees receive:

■ a copy and explanation of the OSHA bloodborne pathogen standard

■ an explanation of our ECP and how to obtain a copy

■ an explanation of methods to recognize tasks and other activities that may involve exposure to blood and OPIM, including what constitutes an exposure incident

■ an explanation of the use and limitations of engineering controls, work practices, and PPE

■ an explanation of the types, uses, location, removal, handling, decontamination, and disposal of PPE

■ an explanation of the basis for PPE selection

■ information on the appropriate actions to take and persons to contact in an emergency involving blood or OPIM

■ an explanation of the procedure to follow if an exposure incident occurs, including the method of reporting the incident and the medical follow-up that will be made available

■ information on the post-exposure evaluation and follow-up that the employer is required to provide for the employee following an exposure incident

■ an opportunity for interactive questions and answers with the person conducting the training session.

Training materials for this facility are available in job site work boxes as well as at 961 Lyell Ave Rochester, NY 14606

RECORDKEEPING

Training Records

Training records are completed for each employee upon completion of training. These documents will be kept for at least three years at 961 Lyell Ave Rochester, NY 14606

The training records include:

■ the dates of the training sessions

■ the contents or a summary of the training sessions

■ the names and qualifications of persons conducting the training

■ the names and job titles of all persons attending the training

Employee training records are provided upon request to the employee or the employee's authorized representative within 15 working days. Such requests should be addressed to Peter D Thurston.

Medical Records

Medical records are maintained for each employee with occupational exposure in accordance with 29 *CFR* 1910.1020, "Access to Employee Exposure and Medical Records."

Peter D Thurston is responsible for maintenance of the required medical records. These confidential

records are kept in 961 Lyell Ave Rochester, NY 14606 for at least the duration of employment plus 30 years.
Employee medical records are provided upon request of the employee or to anyone having written consent of the employee within 15 working days. Such requests should be sent to Peter D Thurston 961 Lyell Ave Rochester, NY 14606.

OSHA Recordkeeping
An exposure incident is evaluated to determine if the case meets OSHA's Recordkeeping Requirements (29 CFR 1904). This determination and the recording activities are done by Peter D Thurston 961 Lyell Ave Rochester, NY 14606

Hearing Conservation Policy

OBJECTIVE

The hearing conservation program shall apply whenever employee noise exposures equal or exceed an 8-hour time-weighted (TWA) sound level of 85 decibels measured on the A scale (slow response) or, equivalently, a dose of fifty percent as measured by noise dosimeters.

POLICY

It is the policy of the Thurston Mechanical, LLC to reduce noise exposure in the workplace to the extent that it is reasonably practicable. In those situations where it is not feasible to reduce noise exposure by suitable engineering means, during exposure evaluation periods, and during implementation of engineering controls, either administrative controls or personal hearing protectors shall be used to ensure the protection of employees.

The Occupational Safety and Health Administration (OSHA) has promulgated regulations limiting employee exposure to noise.

RESPONSIBILITIES

Company

Thurston Mechanical, LLC will:

- Assist in identifying employees who are required to participate in the Hearing Conservation Program by identifying potential areas of concern on the job.
- Document work in areas of excessive noise.
- Inform personnel that a baseline and annual audiograms and participation in a training program are required for all employees reasonably expected to be exposed to dangerous noise levels.
- Schedule preplacement health assessments and baseline and annual audiograms for employees
- Provide a choice of hearing protection devices to those employees requiring them and insure that they are being worn.
- Notify employees, in writing within 21 days, if a standard threshold shift occurs. hearing protection will be re-evaluated in the event of a standard threshold shift

Provides monitoring:
a) Initial clinical evaluation of standard threshold shift;
b) Referral coordination for ENT evaluation of threshold shift to determine if it is noise induced.

Employee

The employee is responsible for complying with all requirements of this Program once it is established that he or she must participate. The employee must:

- Attend all scheduled audiogram appointments to avoid disciplinary actions,
- Wear any required hearing protection
- Attend the required initial and annual training

PROCEDURES

When employee noise exposures equal or exceed an 8-hour time-weighted average (TWA) sound level of 85 dBA, feasible administrative or engineering controls shall be utilized. If such controls fail to reduce 8-hour TWA exposures to less than 85 dBA, personal protective equipment shall be provided and used to reduce the exposure levels. Protective equipment shall also be used to lower exposures to less than 85 dBA TWA until feasible administrative or engineering controls are implemented.

A hearing conservation program shall be implemented whenever employee noise exposures equal or exceed an 8-hour TWA sound level of 85 dBA.

Monitoring

When information indicates that any employee's exposure may equal or exceed an 8-hour time-weighted average of 85 dBA, a monitoring program shall be implemented to identify employees for inclusion in the hearing conservation program and to enable the proper selection of hearing protectors.

Where circumstances as high worker mobility, significant variations in sound level, or a significant component of impulse noise make area monitoring generally inappropriate, representative personal sampling shall be used to comply with the monitoring requirements of this paragraph.

Monitoring shall be repeated whenever a change in production, process equipment, or controls increases noise exposures.

Employee Notification

Each employee, whose noise exposure is monitored, shall be notified of the results of the monitoring. Records of employee exposure to noise are maintained in each employee's file.

Audiometric Testing Program

All employees whose exposures are equal to or exceed an 8-hour TWA of 85 dBA shall be included in an audiometric examination program.

A baseline audiogram shall be performed within 6 months of an employee's first exposure at or above 85 dBA TWA.

Annual audiometric testing shall be performed for each employee exposed at or above an 8-hour TWA of 85 dBA and in accordance with 29 CFR 1910.95.

The audiometric test data shall be evaluated in accordance with 29 CFR 1910.95.

Hearing Protectors

Hearing protectors shall be provided to all employees who are exposed to an 8-hour TWA of 85 dBA. Employees should be required to use hearing protectors in areas where noise levels exceed 85 dBA (8 hour TWA). Hearing protectors shall be worn as required by Section e.1.

Hearing protectors shall be worn by any employee who is exposed to an 8-hour time weighted average of 85 dBA or greater, and who:

- has not yet had a baseline audiogram established or has experienced a standard threshold shift.

Employees shall be given the opportunity to select their hearing protectors from a variety of suitable hearing protectors.

Hearing Protectors Attenuation

Thurston Mechanical, LLC shall evaluate hearing protection attenuation for the specific noise environments in which the protector will be used in accordance with 29 CFR 1910.95 {Appendix B and Section (i)}.

Hearing protector attenuation must be evaluated for specific noise environments. Hearing protectors must attenuate employee noise exposures at least to a TWA of 85 decibels and to 85 decibels or below for employees who have experienced a standard threshold shift (STS). It is recommended that, if possible, all hearing protectors be selected to attenuate noise below 85 dBA.

Hearing protection must be worn by all employees who are exposed to noise above 85dBA. The hearing protector should reduce the noise level below an 8-hr TWA of 85 dBA. All hearing protectors are assigned a noise reduction rating (NRR) which can be found on the individual package or box the hearing protectors came in. This NRR is based on a dBC scale, although most sound measurements are given in a dBA scale. To account for this difference, the NRR number must be reduced by a value of 7 to determine how much protection it will afford in the work environment.

- The equation is as follows: dBA’ = dBA – (NRR – 7)
  where: dBA’ = effective noise level for the hearing protector
  dBA = measured A-weighted noise level (sound level meter readings)
  NRR = noise reduction rating obtained on package
- If the noise of a piece of equipment is measured at 96 dBA, a hearing protector with a NRR of at least 18 would be needed:
  dBA’ = dBA – (NRR – 7)
  85 = 96 – (NRR – 7)
  NRR – 7 = 96 – 85,
  NRR = 11 + 7
  NRR = 18.
- In a case where the hearing protector does not offer enough protection, earmuffs and plugs can be worn together. In this case, determine the effective NRR of the plugs and then add 5dBA. This number is then

subtracted from the 8-hr TWA to determine the actual exposure at the employee's ear. Again, this number should be less than 85dBA.
- Remember, hearing protectors must be worn properly to provide maximum protection.

Training Program

A training program has been established for all employees who are exposed to noise at or above an 8-hour time-weighted average of 85 decibels. This training program will be repeated annually for each employee included in the hearing conservation program.

The employees must be informed of the following.

- The effects of noise on hearing
- Physical damage of cochlea
- Location of high noise areas
- Off the job hearing hazards such as air boating, chain saws, gun fire, etc.
- Purpose of hearing protection devices and how they work.
- Instructions on selection, fitting, use and care of hearing protectors.
- The types and styles of hearing protection devices available and attenuation of the various types.
- Where to obtain hearing protectors.
- The purpose of audiometric testing and an explanation of test procedures.

Posting

Areas where the noise level exceeds 85 dBA, must be posted with a warning and a requirement for the use of hearing protection.

Costs

The cost of testing and training is borne by Thurston Mechanical, LLC. Hearing protection device costs are the responsibility of Thurston Mechanical, LLC.

Bloodborne Pathogens

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PROGRAM ADMINISTRATION

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METHODS OF IMPLEMENTATION AND CONTROL

Universal Precautions

All employees will utilize universal precautions.

Exposure Control Plan

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Workplace Hygiene

Handwashing facilities are identified at each job site prior to work commencing.
If provision of handwashing facilities are not feasible, then an appropriate antiseptic hand cleanser in conjunction with cloth/paper towels or antiseptic towelettes will be provided to all employees.
All equipment or environmental surfaces shall be cleaned & decontaminated after contact with blood or other infectious materials.

Personal Protective Equipment (PPE)

PPE is provided to our employees at no cost to them. Training in the use of the appropriate PPE for specific tasks or procedures is provided by Peter D. Thurston.
The types of PPE available to employees are as follows:

Gloves, eye protection, respirators, face masks, protective clothing as warranted
PPE is located in job site work boxes as well as 961 Lyell Ave Rochester, NY 14606 and may be obtained by any employee as needed or required.
All employees using PPE must observe the following precautions:
■ Wash hands immediately or as soon as feasible after removing gloves or other PPE.
■ Remove PPE after it becomes contaminated and before leaving the work area.
■ Used PPE may be disposed of in designated job site and shop recepticles
■ Wear appropriate gloves when it is reasonably anticipated that there may be hand contact with blood or OPIM, and when handling or touching contaminated items or surfaces; replace gloves if torn, punctured or contaminated, or if their ability to function as a barrier is compromised.
■ All contaminated PPE (excluding respirators) must be discarded after use
■ Never wash or decontaminate disposable gloves for reuse.
■ Wear appropriate face and eye protection when splashes, sprays, spatters, or droplets of blood or OPIM pose a hazard to the eye, nose, or mouth.
■ Remove immediately or as soon as feasible any garment contaminated by blood or OPIM, in such a way as to avoid contact with the outer surface.
The procedure for handling used PPE is as follows:
discard disposable items. Respirators must be wiped down with isopropyl alcohol before and after use. Used filter cartridges must be discarded and replaced with new cartridges.

POST-EXPOSURE EVALUATION AND FOLLOW-UP
Should an exposure incident occur, contact Peter D Thurston at the following number 585-254-4410.
An immediately available confidential medical evaluation and follow-up will be conducted by nearest Urgent Care or hospital facility.
Following initial first aid (clean the wound, flush eyes or other mucous membrane, etc.), the following activities will be performed:
■ Document the routes of exposure and how the exposure occurred.
■ Identify and document the source individual (unless the employer can establish that identification is infeasible or prohibited by state or local law).
■ Obtain consent and make arrangements to have the source individual tested as soon as possible to determine HIV, HCV, and HBV infectivity; document that the source individual's test results were conveyed to the employee's health care provider.
■ If the source individual is already known to be HIV, HCV and/or HBV positive, new testing need not be performed.
■ Assure that the exposed employee is provided with the source individual's test results and with information about applicable disclosure laws and regulations concerning the identity and infectious status of the source individual (e.g., laws protecting confidentiality).
■ After obtaining consent, collect exposed employee's blood as soon as feasible after exposure incident, and test blood for HBV and HIV serological status
■ If the employee does not give consent for HIV serological testing during collection of blood for baseline testing, preserve the baseline blood sample for at least 90 days; if the exposed employee elects to have the baseline sample tested during this waiting period, perform testing as soon as feasible.

ADMINISTRATION OF POST-EXPOSURE EVALUATION AND FOLLOW-UP

Peter D Thurston ensures that the health care professional evaluating an employee after an exposure incident receives the following:
■ a description of the employee's job duties relevant to the exposure incident
■ route(s) of exposure
■ circumstances of exposure

PROCEDURES FOR EVALUATING THE CIRCUMSTANCES SURROUNDING AN EXPOSURE INCIDENT
Peter D Thurston will review the circumstances of all exposure incidents to determine:
■ engineering controls in use at the time
■ work practices followed
■ a description of the device being used (including type and brand)
■ protective equipment or clothing that was used at the time of the exposure incident (gloves, eye shields, etc.)
■ location of the incident
■ procedure being performed when the incident occurred
■ employee's training
If revisions to this ECP are necessary Peter D. Thurston will ensure that appropriate changes are made.
(Changes may include an evaluation of safer devices, adding employees to the exposure determination list, etc.)

EMPLOYEE TRAINING
All employees who have occupational exposure to bloodborne pathogens receive initial and annual training conducted by a third party, hired by Thurston Mechanical to conduct annual safety training.
All employees receive:
■ a copy and explanation of the OSHA bloodborne pathogen standard
■ an explanation of our ECP and how to obtain a copy
■ an explanation of methods to recognize tasks and other activities that may involve exposure to blood and OPIM, including what constitutes an exposure incident
■ an explanation of the use and limitations of engineering controls, work practices, and PPE
■ an explanation of the types, uses, location, removal, handling, decontamination, and disposal of PPE
■ an explanation of the basis for PPE selection
■ information on the appropriate actions to take and persons to contact in an emergency involving blood or OPIM
■ an explanation of the procedure to follow if an exposure incident occurs, including the method of reporting the incident and the medical follow-up that will be made available
■ information on the post-exposure evaluation and follow-up that the employer is required to provide for the employee following an exposure incident
■ an opportunity for interactive questions and answers with the person conducting the training session.
Training materials for this facility are available in job site work boxes as well as at 961 Lyell Ave Rochester, NY 14606

RECORDKEEPING

Training Records

Training records are completed for each employee upon completion of training. These documents will be kept for at least three years at 961 Lyell Ave Rochester, NY 14606

The training records include:

■ the dates of the training sessions
■ the contents or a summary of the training sessions
■ the names and qualifications of persons conducting the training
■ the names and job titles of all persons attending the training

Employee training records are provided upon request to the employee or the employee's authorized representative within 15 working days. Such requests should be addressed to Peter D Thurston.

Medical Records

Medical records are maintained for each employee with occupational exposure in accordance with 29 *CFR* 1910.1020, "Access to Employee Exposure and Medical Records."

Peter D Thurston is responsible for maintenance of the required medical records. These confidential records are kept in 961 Lyell Ave Rochester, NY 14606 for at least the duration of employment plus 30 years.

Employee medical records are provided upon request of the employee or to anyone having written consent of the employee within 15 working days. Such requests should be sent to Peter D Thurston 961 Lyell Ave Rochester, NY 14606.

OSHA Recordkeeping

An exposure incident is evaluated to determine if the case meets OSHA's Recordkeeping Requirements (29 CFR 1904). This determination and the recording activities are done by Peter D Thurston 961 Lyell Ave Rochester, NY 14606

Hepatitis B

The Hepatitis B Vaccine is provided to all employees with occupational exposure.

Stop Work Policy & Program

The purpose of this policy is to provide an outline of site/project "stop work authority" for employees.

Definitions

SWA- Stop Work Authority
EHS – Environmental, Health & Safety

Policy and Program Overview

This program formally establishes the Stop Work Authority (SWA) for all employees to stop individual tasks or group operations when the environmental, health or safety risk is not clearly established or understood.

It is Thurston Mechanical, LLC's policy[i] that:

- All employees have the authority and obligation to stop any task or operations where concerns or questions regarding the control of EHS exist;
- No work will resume until all stop work issues and concerns have been adequately addressed;
- Any form of retribution or intimidation directed at any individual or company for exercising their authority as outlined in this program will not be tolerated.
- As with any policy, accountability for non-compliance will follow disciplinary procedures.

Procedures
Company employees are responsible to initiate a “stop work” intervention when warranted, support the intervention of others and properly report all “stop work” actions.
Foremen/supervisors are responsible to create a culture where the SWA is exercised freely, work to resolve issues before operations resume, recognize proactive participation and ensure that all “stop work” actions are properly reported with required follow-up completed.
Site Managers must establish the clear expectations to exercise the SWA, create a culture where the SWA is exercised freely, resolves SWA conflicts when they arise and hold those accountable that choose not to comply with established SWA policies.
EHS staff in support of operations are responsible for monitoring compliance with the requirements of this program, maintenance of associated documents, processes and training materials, identification of trends, and sharing of lessons learned.

Intervention Protocol
In general terms, the SWA process involves a stop, notify, correct and resume approach for the resolution of perceived unsafe work actions or conditions.
A workforce that clearly understands how to initiate, receive and respond to a “stop work” intervention is more likely to participate. Though obvious to some, the following protocol creates an environment where people know how to act and respond.
Though situations may differ, the following steps should be the framework for all stop work interventions.

Protocol Instructions
Steps:
- When a person identifies a perceived unsafe condition, act, error, omission, or lack of understanding that could result in an undesirable event, a “stop work” intervention shall be immediately initiated with the person(s) potentially at risk. No matter what actions follow, **all work must stop immediately** once a stop work intervention has been initiated by any employee, contractor or visitor.
- If the supervisor is readily available and the affected person(s) are not in immediate risk, the “stop work action” and resolution should be coordinated through the supervisor. If the supervisor is not readily available, the “stop work” intervention should be initiated directly with those at risk.
- “Stop work” interventions should be initiated in a positive manner by briefly introducing yourself and starting a conversation with the phrase “I am using my stop work authority because…” Using this phrase will clarify the users’ intent and set expectations as detailed in this procedure.
- Notify all affected personnel and supervision of the stop work issue. Stop associated work activities, remove person(s) from the area, stabilize the situation and make the area as safe as possible.
- After work is stopped, all parties shall discuss and gain agreement on the stop work issue.
- If determined and agreed that the task or operation is OK to proceed as is (i.e., the stop work initiator was unaware of certain facts or procedures) the affected persons should thank the initiator for their concern and proceed with the work.
- If determined and agreed that the stop work issue is valid, we will resolve the issue to all affected person’s satisfaction prior to the commencement of work.
- If the stop work issue cannot be resolved immediately, work shall be suspended until proper resolution is achieved.
- Positive feedback should be given to all affected employees regarding resolution of the stop work issue. Under no circumstances should retribution be directed at any person(s) who exercise in good faith their stop work authority as detailed in this program.

7.1.10 All stop work interventions (whether resolved on the spot or not) and associated detail shall be documented and reported as detailed in this program. The stop work initiator and responsible supervisor shall sign the SWA form/document.

Reporting

- All “stop work” interventions exercised under the authority of this program shall be documented on the Stop Work Incident Investigation Report.
- “STOP WORK” reports shall be reviewed by Project Managers, Supervisors and Safety Officers in order to:
    Monitor participation;
    Determine quality of interventions and follow-up;
    Identify opportunities for improvement;
    Facilitate sharing of learnings.

Follow-up

It is the desired outcome of any “stop work” intervention that the identified safety concerns be addressed to the satisfaction of all involved persons prior to resuming work. Although most issues can be adequately resolved in a timely fashion at the job site, occasionally additional investigation and corrective actions may be required to identify and address root causes.

“Stop Work” interventions that required additional investigation or follow-up will be handled utilizing existing protocols and procedures for incident investigation and follow-up.

Training

Training regarding this SWA Policy and Program will be conducted as part of all new employee and contractor orientations. Additionally, a review of the SWA Policy shall be completed as part of all field location safety briefings and regularly in safety meetings.

Documentation of all training and reviews shall be maintained as per established procedures.

Stop Work Form Description

When an imminent risk stop work has been issued, the supervisor of the job whose work has been stopped must make sure this form is completed and observation recorded in as complete and objective a manner as possible. Work may not be resumed until this form is signed, indicating re-authorization by at least one of the following: Supervisor, Safety Manager or Project Manager.

Emergency Action Plan

Purpose

The purpose of an Emergency Action Plan is to protect workers from serious injury, property loss, or loss of life, in the event of an actual or potential emergency. An emergency may include, but not limited to, any of the following: fire, tornado, earthquake, bomb threat, hazardous chemical spill, or active shooter.

Procedures

Emergency preparedness and response planning is an important factor in ensuring worker safety, protecting the environment, public safety, and company assets. Therefore, operations do not require any worker to continue operating critical equipment during an emergency evacuation. Following an emergency evacuation, no worker is permitted to re-enter the building until authorized.

A written copy of the Emergency Action Plan shall be kept in the workplace and available to workers for review.

Training

The Safety Manager has overall responsibility of designating and training workers to assist in a safe and orderly evacuation as well as implementing this plan and updating as needed. Additionally, the Safety Manager will assist

any worker who may need more information about the plan or an explanation of their duties under the plan. All workers shall be trained in the following areas:

- The Alarm System
- Various types of emergency scenarios (Fire, Chemical Release, Severe Weather, Lightening, etc.)
- Preferred means of reporting fires and other emergencies
- Emergency escape procedures and route assignments
- Procedures to account for all workers after emergency evacuation has been completed
- Rescue and medical duties for those workers who perform them
- Designated Meeting Areas (Muster Areas)

Refresher training is required; (1) When the plan is developed or the worker is assigned initially to a job, (2) When the worker's responsibilities under the plan change, or (3) When the plan is changed.

Alerting Building Occupants

In case of a fire, call the local Fire Department at 911. In addition, the smoke alarms will alert building occupants of the need for evacuation. Any pertinent fire or rescue information should be conveyed to the Fire Department.

Workers discovering a fire, smoky condition or any other emergency shall activate the fire alarm system and make a verbal announcement immediately.

Evacuation Procedures

When the fire alarm sounds or a verbal announcement is made, all workers should ensure that nearby workers are aware of the emergency, quickly shutdown operating equipment, close doors and exit the building.

All workers should proceed to their Designated Muster Area via their primary or alternate exits and await further instructions from their Safety Monitor.

REMEMBER R.A.C.E.

> **Rescue:** When you discover a fire, rescue people in immediate danger if you can do so without endangering yourself.
> **Alarm:** Sound the alarm by pulling a fire box and call 911 from a safe distance.
> **Confine:** Close all doors, windows, and other openings.
> **Evacuate:** Evacuate the building.

Designated Meeting Area

When an alarm sounds or a verbal announcement is made, all occupants will proceed to the nearest exit and gather at the designated meeting area or “Muster Area” which is pictured on the facilities emergency evacuation maps throughout the facility. The “Muster Area” is designated to be the safe meeting point for all workers. Once the evacuation has been completed, the Safety Monitor shall conduct a head count. The “Receptionist” will have the responsibility of bringing the “Sign-In Roster” to the Muster Area to account for all workers and visitors after the evacuation.

Rescue & Medical Duties

- Do not move injured workers.
- Always keep injured workers lying down, covered, and warm.
- Only trained workers will conduct rescue and medical duties.

Fire Protection

Purpose

Fire Prevention/Protection Policy is intended to provide compliance with all related regulations and standard safe work practice. The purpose of the policy is to prevent fires and to provide guidelines for action if a fire does occur.

Fire prevention program combines the following policies:

- PPE Policy
- Electrical Safety Policy
- Emergency Action Plan

These policies encompass methods used for incidence avoidance, incident response and specialized training required in the event of a fire.

Issues addressed in the above policies include, but are not limited to:

- Evacuation Procedure
- Extinguisher Training
- Basic Process Safety Training (if applicable)
- Hot Work Safety Training (if applicable)
- Confined Space Entry Safety Training (if applicable)
- Emergency Life Support Training
- Respiratory Protective Devices Training (if applicable)
- Assured Grounding Programs

Policy

Workers shall be informed of the proper actions to take in the event of a fire. This includes, but is not limited to, notification and evacuation procedures. It is STRESSED that at no time does the task of fighting fire supersede an employee's primary duties of:

- Ensuring their own personal safety and the safety of others.
- Reporting the incident to the proper authority and ensuring personnel accountability for yourself and all subordinates at the jobsite, in accordance with company and client policy.
-

Procedures

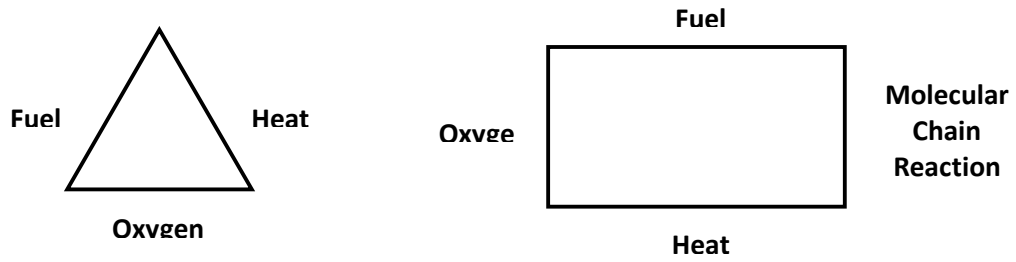
- All workers are responsible for good housekeeping practices to enhance fire prevention methods. Supervisors will be held accountable for the housekeeping of their job sites.
- If applicable, welding machine mufflers will be equipped with an approved spark arresting muffler.
- Only approved containers will be used during fueling operations. These shall be of the self-closing type.
- Combustible and flammable liquids shall be handled and stored in approved containers, cabinets, and areas that are designed for fire prevention. All combustible and flammable materials will be handled and stored in compliance with applicable regulations and client requirements. The quantity of flammable/combustible material shall be kept to a minimum on the job site.
- Welding, cutting, and grinding sparks shall be contained.
- Hot work areas shall be kept wetted down, and a fire extinguisher and hose maintained on each jobsite.
- Oily rags shall be immediately disposed of in designated hazardous waste containers.
- No hot work is to be performed without a Hot Work Permit.
- All vehicle entry into process areas requires a permit or permission from the operator.
- Use bonding straps to discharge and prevent static charges during transfer of flammable liquids from one container to another.
- Report all spills or suspicious odors immediately.
- Fire extinguishers are to be kept in areas easily accessible to workers. Only approved fire extinguishers are to be used. They must have an inspection tag attached and be maintained in a fully charged, ready to operate state. Portable fire extinguishers are to be inspected monthly and annually with documentation supporting the inspection and maintenance schedule. Training is provided to all workers who use or may use fire extinguishers. Fire extinguisher training will include general principles of fire and extinguisher use and the hazards involved with incipient stage firefighting.
- **NEVER** put yourself or others at risk while attempting to extinguish an incipient fire.
- **DO NOT USE** any fire hoses larger than 1-3/4", unless fully trained as an industrial firefighter.
- **NEVER** attempt to extinguish a pressurized fuel fed fire.
- **DO NOT** direct a fire nozzle with a straight stream at any type of LPG fire. This action could extinguish the fire, producing an LPG vapor cloud capable of detonation.
- **DO NOT USE** fire monitors as the force can damage small equipment and certain high chrome alloy equipment cannot have water applied as cracking could occur.
- **DO NOT APPLY** water to any acid or caustic release as it can cause a violent reaction. Additionally, low concentration acids or caustics become extremely corrosive, causing an increasing leak condition.

In the Event of a Fire

- Remain calm
- Only extinguish a fire when it is clearly within your abilities and the equipment available
- Know the location of the nearest alarm and how to activate the emergency system
- Know the evacuation routes and collection points
- If the fire cannot be extinguished, leave the area immediately and report to your evacuation area
- Await further instructions from the Incident Commander, or designated responsible personnel
-

Basic Fire Science

The combination of fuel, heat, oxygen equals the well-known fire triangle. To understand fire better, a fourth factor is added, a molecular chain reaction. This is due to the fact that fire results from a series of reactions in which complicated molecules "crack" into easily oxidized fragments. Disruption of this chain, along with the removal of fuel, heat or oxygen, is recognized as a method of fire extinguishment through the use of dry chemical extinguishers.



- **Heat Energy** - Can be produced by building up molecules (composition) or breaking apart (decomposition) by heat or a solution when materials are dissolved in a liquid, or by combustion.
- **Heat Transfer** - A law of physics states that heat tends to flow up from a hot substance or place to a cold substance or place. This is through conduction (transfer of heat through a medium such as metals) or through convection (transfer of heat with a medium-usually circulatory).
- **Fuels** - Those substances that will burn when heat is applied. The most common fuels are not pure elements such as carbon, but compounds and mixtures such as paper and wood.
- **Oxygen** - Makes up a major portion of the oceans and earth's crust and one-fifth of our atmosphere. Atmospheric oxygen is the major source of oxygen that supports combustion. Oxygen itself does not burn, however, without it, combustion is impossible. Normal burning is the combination of fuels with oxygen under the influence of heat.
- **Combustion** - A rapid oxidation or chemical combination accompanied by heat.
- **Oxidation** - The ability of materials to produce oxygen during a chemical reaction.
- **Spontaneous Combustion** - When oxidation is allowed to occur, enough oxygen is available, heat is produced, molecules become more energetic and combine with oxygen at an increasing rate, temperatures rise, and visible heat (flames) are produced.

Classes of Fires

- Class A - **Ordinary combustibles (wood/paper/textiles)**
- Class B - **Flammable liquids (gasoline/oils/grease)**
- Class C - **Live electric (wiring/generators/motors)**
- Class D - **Combustible metals (finely divided form/chips, turnings)**
- Class K – **Kitchen (oils/grease)**

Types of Fire Extinguishers

- **Water** - extinguisher for ordinary combustible fires
- **Dry Chemical or CO2** - extinguisher for electrical equipment fires and for flammable liquid fires
- **Multipurpose Dry Chemical** - extinguisher for ordinary combustible fires, liquid fires, and electrical equipment fires
- **Foam** - extinguishing agent for hydrocarbon fires

HAZWOPER

PURPOSE

Thurston Mechanical LLC , hereafter referred to as "The Company", has developed and implemented this written safety and health program for workers involved in hazardous waste operations.

This program is established for the purposes of evaluation, identification, and control of safety and health hazards to workers when confronted with hazardous wastes, and to established procedures for emergency response to hazardous waste situations and operations.

The written safety and health program includes the organizational structure for response.

The plan also establishes requirements for:

- A site-specific comprehensive work plan
- Site-specific safety and health plan
- Confirmation that safety and health training program components are provided.
- A medical surveillance program appropriate to work situations and potential exposures.
- The Company standard operating procedures for safety and health; and
- Associations and coordination procedures as required between The Company safety and health programs and site-specific work and/or site situations .

Safety requirements for Contractors and Subcontractors. When the Company uses a contractor or subcontractor(s) to perform work at a hazardous waste job site or to perform hazardous waste operations, such non-company personnel shall be told in advance of site emergency response procedures and any known hazards or potential hazards that could result in fire, explosion, health, safety, or other such exposures.

The Company written safety and health program, and any site-specific programs, work plans or support information relating to the work, shall be made available to any such contractor or subcontractor. This information also shall be made available to workers or their designated representative(s), and to OSHA other government personnel with regulatory authority over the job site or work operations.

RESPONSIBILITIES

This program shall be administered in accordance with the following specific chain of command, as well as the following designation of the program responsibilities to supervisors and workers.

- The site superintendent has the responsibility and authority to direct all hazardous waste operations.
- The safety coordinator or designated site safety representative has the responsibility and authority to develop and implement the site safety and health plan and verify compliance.
- Other workers and non-company personnel shall be assigned specific responsibilities and tasks to be performed as part of hazardous waste site and emergency response operations.

The site-specific organizational structure shall be reviewed and updated as required to ensure that waste site work and safety plans are kept current.

This program's comprehensive work plan will explain tasks and objectives, as well as resources required to complete the project in accordance with the goals and objectives.

The work plan will specifically list and explain planned clean-up activities and The Company standard operating procedures for performance of this kind of work. This includes defining specific tasks and objectives, and how these tasks and objectives will be accomplished.

The work plan will explain workers needs as anticipated through project planning and establish procedures and processes for training as required performing tasks safely and in accordance with regulatory requirements. This includes providing information programs as required for the work.

The work plan also shall establish and implement a medical surveillance program as required for the work being performed.

PROCEDURES

Site-specific safety and health plan

The Company has developed and implemented a written safety and health program for workers involved in hazardous waste operations that shall be available for inspection by workers, their representatives and OSHA personnel.

The program is designed to identify, evaluate, and control safety and health hazards in their facilities for the purpose of worker protection, to provide for emergency response meeting The Company and regulatory requirements and to address as appropriate site analysis, engineering controls, maximum exposure limits, hazardous waste handling procedures and uses of new technologies.

The site safety and health plan shall be maintained on the job site. It shall identify and establish procedures for protecting workers from safety and health hazards identified at each phase of site operations.

The Company written Hazard Communication Program shall be used to meet the requirements of 29 CFR 1910.1200 as part of the Company's overall safety and health program implementation.

The Company site-specific safety and health plan will include the following components, as well as others when required by the work:

- Hazard analysis for each site task and operation contained in the work plan.
- Worker training assignments in accordance with program and regulatory requirements.
- Designation of personal protective equipment required for use by workers based on job hazard analysis for specific tasks and operations.
- Requirements of the medical surveillance program.
- Information about frequency and types of air monitoring and personnel monitoring, as well as any environmental sampling techniques and instrumentation that will be utilized. This shall include methods of maintenance and protocols for the calibration of monitoring and sampling equipment.
- Site control measures as explained in the project's site control program.
- Requirements and procedures for decontamination.
- Emergency response plan and procedures, including specific personal protective equipment and other equipment anticipated to be needed for emergencies.

- Safety procedures for entering any confined spaces as authorized by the site superintendent. Any confined space entries shall be performed in accordance with The Company's Confined Space Entry Program.
- The site-specific plan and program components for spill containment at the job site.
- A pre-entry briefing shall be held prior to initiating any site activity, and at such other times as necessary to ensure that workers are kept informed about site safety and health plan components. This information shall be updated and communicated as needed to keep workers aware of current situations.
- Inspections shall be conducted by the safety coordinator or the designated site safety representative or site superintendent. The Company also may utilize qualified third parties to conduct these and/or confirmation inspections. Any hazards, unsafe situations or safety deficiencies discovered by inspection shall be reported to the site superintendent and corrected.

Training

General site workers engaged in hazardous substance removal or other activities which expose or potentially expose workers to hazardous substances and health hazards shall receive a minimum of 40 hours of instruction off the site, and a minimum of three days actual field experience under the direct supervision of a trained experienced supervisor.

First Responder Awareness Level

First responders at the awareness level are individuals who are likely to witness or discover a hazardous substance release and who have been trained to initiate an emergency response sequence by notifying the proper authorities of the release. They would take no further action beyond
notifying the authorities of the release. First responders at the awareness level shall have sufficient training or have had sufficient experience to objectively demonstrate competency in the following areas:

- An understanding of what hazardous substances are, and the risks associated with them in an incident.
- An understanding of the potential outcomes associated with an emergency created when hazardous substances are present.
- The ability to recognize the presence of hazardous substances in an emergency.
- The ability to identify hazardous substances, if possible.
- An understanding of the role of the first responder awareness individual in The Company's emergency response plan including site security and control and the
- U.S. Department of Transportation's Emergency Response Guidebook.
- The ability to realize the need for additional resources, and to make appropriate notifications to the communication center.

First Responder Operations Level

First responders at the operations level are individuals who respond to releases or potential releases of hazardous substances as part of the initial response to the site for the purpose of protecting nearby persons, property, or the environment from the effects of the release. They are trained to respond in a defensive fashion without trying to stop the release. Their function is to contain the release from a safe distance, keep it from spreading, and prevent exposures. First responders at the operational level shall have received at least eight hours of training or have had sufficient experience to objectively demonstrate competency in the following areas in addition to those listed for the awareness level and The Company shall so certify:

- Knowledge of the basic hazard and risk assessment techniques.
- Know how to select and use proper personal protective equipment provided to the first responder operational level.
- An understanding of basic hazardous materials terms.
- Know how to perform basic control, containment and/or confinement operations within the capabilities of the resources and personal protective equipment available with their unit.
- Know how to implement basic decontamination procedures.
- An understanding of the relevant standard operating procedures and termination procedures.

Hazardous Materials Technician

Hazardous materials technicians are individuals who respond to releases or potential releases for the purpose of stopping the release. They assume a more aggressive role than a first responder at the operations level in that they will approach the point of release in order to plug, patch or otherwise stop the release of a hazardous substance. Hazardous materials technicians shall have received at least 24 hours of training equal to the first responder operations level and in addition, have competency in the following areas and The Company shall so certify:

- Know how to implement The Company's emergency response plan.
- Know the classification, identification, and verification of known and unknown materials by using field survey instruments and equipment.
- Be able to function within an assigned role in the Incident Command System.
- Know how to select and use proper specialized chemical personal protective equipment provided to the hazardous materials technician.
- Understand hazard and risk assessment techniques.
- Be able to perform advance control, containment, and/or confinement operations within the capabilities of the resources and personal protective equipment available with the unit.
- Understand and implement decontamination procedures.
- Understand termination procedures.
- Understand basic chemical and toxicological terminology and behavior.

Hazardous Materials Specialist

Hazardous materials specialists are individuals who respond with and provide support to hazardous materials technicians. Their duties parallel those of the hazardous materials technician; however, those duties require a more directed or specific knowledge of the various substances they may be called upon to contain. The hazardous materials specialist would also act as the site liaison with Federal, state, local and other government authorities regarding site activities. Hazardous materials specialists shall have received at least 24 hours of training equal to the technician level and in addition have competency in the following areas and The Company shall so certify:

- Know how to implement the local emergency response plan.
- Understand classification, identification, and verification of known and unknown materials by using advanced survey instruments and equipment.
- Know the state emergency response plan.
- Be able to select and use proper specialized chemical personal protective equipment provided to the hazardous materials specialist.
- Understand in-depth hazard and risk techniques.

- Be able to perform specialized control, containment, and/or confinement operations within the capabilities of the resources and personal protective equipment available.
- Be able to determine and implement decontamination procedures.
- Have the ability to develop a site safety and control plan.
- Understand chemical, radiological, and toxicological terminology and behavior.

On Scene Incident Commander

Incident commanders, who will assume control of the incident scene beyond the first responder awareness level, shall receive at least 24 hours of training equal to the first responder operations level and in addition have competency in the following areas and The Company shall so certify:

- Know and be able to implement The Company's incident command system.
- Know how to implement The Company's emergency response plan.
- Know and understand the hazards and risks associated with workers working in chemical protective clothing.
- Know how to implement the local emergency response plan.
- Know of the state emergency response plan and of the Federal Regional Response Team.
- Know and understand the importance of decontamination procedures.

Workers who are trained in accordance with the plan shall receive an annual refresher on or before the initial training date of expiration. A record of methods used must be kept.

Engineering Controls

Engineering controls, work practices, personal protective equipment, or a combination of these shall be implemented as required to protect workers from exposure to hazardous substances and safety and health hazards.

Engineering controls and work practices shall be instituted to reduce and maintain worker exposure to or below the permissible exposure limits for substances regulated by 29 CFR Part 1910, to the extent required by Subpart Z, except to the extent that such controls and practices are not feasible.

Engineering controls which may be feasible include the use of pressurized cabs or control booths on equipment, and/or the use of remotely operated material handling equipment. Work practices which may be feasible are removing all non-essential workers from potential exposure during opening of drums, wetting down dusty operations and locating workers upwind of possible hazards.

Whenever engineering controls and work practices are not feasible, or not required, any reasonable combination of engineering controls, work practices and PPE shall be used to reduce and maintain to or below the permissible exposure limits or dose limits for substances regulated by 29 CFR Part 1910, Subpart Z.

The Company shall not implement a schedule of worker rotation as a means of compliance with permissible exposure limits or dose limits except when there are no other feasible ways of complying with the airborne or dermal dose limits for ionizing radiation.

Monitoring Requirements and Procedures

Monitoring shall be performed where there may be a question of worker exposure to hazardous concentrations of hazardous substances in order to assure proper selection of engineering controls, work practices and personal protective equipment so that workers are not exposed to levels which exceed permissible exposure limits, or published exposure levels if there are no permissible exposure limits, for hazardous substances.

Air monitoring shall be used to identify and quantify airborne levels of hazardous substances and safety and health hazards to determine the appropriate level of worker protection needed on site.

Upon initial entry, representative air monitoring shall be conducted to identify any IDLH condition, exposure over permissible exposure limits or published exposure levels, exposure over a radioactive material's dose limits or other dangerous condition such as the presence of flammable atmospheres, oxygen-deficient environments.

Periodic monitoring shall be conducted when the possibility of an IDLH condition or flammable atmosphere has developed or when there is indication that exposures may have risen over permissible exposure limits or published exposure levels since prior monitoring. Situations where it shall be considered whether the possibility that exposures have risen are as follows:

- When work begins on a different portion of the site.
- When contaminants other than those previously identified are being handled.
- When a different type of operation is initiated (e.g., drum opening as opposed to exploratory well drilling.)
- When workers are handling leaking drums or containers or working in areas with obvious liquid contamination (e.g., a spill or lagoon.)
- Following the start of the actual clean-up phase of any hazardous waste operation (for example, when soil, surface water or containers are moved or disturbed), the Company shall monitor workers who are likely to have the highest exposures to any hazardous substances and health hazards that may be present above permissible exposure limits, or published exposure levels.
- This monitoring shall be performed using personal sampling frequently enough to characterize worker exposures.
- The Company may utilize a representative sampling approach by documenting that the workers and chemicals chosen for monitoring are based on the criteria stated in Item v) immediately above. If the workers likely to have the highest exposure are over permissible exposure limits or published exposure limits, then monitoring shall continue to determine all workers likely to be above those limits. The Company may utilize a representative sampling approach by documenting that the workers and chemicals chosen for monitoring are based on the criteria stated above.
- The Company shall develop and implement a program component to inform workers, contractors, and subcontractors (or their representative) engaged in hazardous waste operations of the nature, level, and degree of exposure likely as a result of participation in such hazardous waste operations.
- Workers, contractors, and subcontractors working outside of the operations part of a site are not covered by this program.

Policies and Procedures for Decontamination

Procedures for all phases of decontamination shall be developed and implemented by The Company for each hazardous waste work location.

Decontamination procedures for the job site shall be communicated to workers and implemented before personnel or equipment enters areas where there is a potential for exposure to hazardous substances.

Site-specific standard operating procedures shall be developed and utilized to minimize worker contact with hazardous substances, or with equipment that has contacted hazardous substances.

All workers and personnel leaving a contaminated area shall be decontaminated in accordance with The Company and regulatory safety and health requirements. All contaminated clothing and equipment leaving a contaminated area shall be appropriately disposed of or decontaminated.

Decontamination procedures shall be monitored by the designated site safety representative and/or site superintendent, with ongoing review by the safety coordinator. This monitoring is intended to determine the effectiveness of decontamination procedures and practices. When such procedures or practices are found to be ineffective, appropriate steps shall be taken to correct any deficiencies.

Decontamination operations shall be performed in one or more areas that have been selected to minimize the exposure of uncontaminated workers or equipment to contaminated workers or equipment.

All equipment and solvents used for decontamination shall be decontaminated or disposed of properly.

Protective clothing and equipment shall be decontaminated, cleaned, laundered, maintained, or replaced as needed to maintain their effectiveness.

Workers whose non-impermeable clothing becomes wetted with hazardous substances shall immediately remove that clothing and proceed to shower. The clothing shall be disposed of or decontaminated before it is removed from the work zone.

Unauthorized workers shall not remove protective clothing or equipment from change rooms.

Commercial laundries or cleaning establishments that decontaminate protective clothing or equipment shall be informed of the potentially harmful effects of exposure to hazardous substances.

Where the decontamination procedure indicates a need for regular showers and change rooms outside of a contaminated area, they shall be provided and meet the requirements of 29 CFR 1910.141. If temperature conditions prevent the effective use of water, then other effective means for cleansing shall be provided and used.

Sanitation at Temporary Workplace

An adequate supply of potable water shall be provided on the site.

Portable containers used to dispense drinking water shall be capable of being tightly closed and equipped with a tap. Water shall not be dipped from containers.

Any container used to distribute drinking water shall be clearly marked as to the nature of its contents and not used for any other purpose.

Where single service cups (to be used but once) are supplied, both a sanitary container for the unused cups and a receptacle for disposing of the used cups shall be provided.

Outlets for non-potable water, such as water for firefighting purposes shall be identified to indicate clearly that the water is unsafe and is not to be used for drinking, washing, or cooking purposes.

There shall be no cross-connection, open or potential, between a system furnishing potable water and a system

furnishing non-potable water.

Toilets shall be provided for workers according to Table H-120.2 in 1910.120(n)(3).

Under temporary field conditions, provisions shall be made to ensure not less than one toilet facility is available.

Hazardous waste sites, not provided with a sanitary sewer, shall be provided with the following toilet facilities unless prohibited by local codes:

- Chemical toilets
- Recirculation toilets
- Combustion toilets
- Flush toilets

These requirements for sanitation facilities shall not apply to mobile crews having transportation readily available to nearby toilet facilities.

Doors entering toilet facilities shall be provided with entrance locks controlled from inside the facility.

All food service facilities and operations for workers shall meet the applicable laws, ordinances, and regulations of the jurisdictions in which they are located.

When temporary sleeping quarters are provided, they shall be heated, ventilated, and lighted.

The Company shall provide adequate washing facilities for workers engaged in operations where hazardous substances may be harmful to workers. Such facilities shall be in near proximity to the worksite; in areas where exposures are below permissible exposure limits, and which are under the control of The Company; and shall be so equipped as to enable workers to remove hazardous substances from themselves.

When hazardous waste clean-up or removal operations commence on a site and the duration of the work will require six months or greater time to complete, The Company shall provide showers and change rooms for all workers exposed to hazardous substances and health hazards involved in hazardous waste clean-up or removal operations.

Showers shall be provided and shall meet the requirements of 29 CFR 1910.141(d)(3).

Motor Vehicle Safety

PURPOSE

This written Motor Vehicle Safety Program establishes guidelines to ensure that we hire capable operators, only allow eligible operators to drive a "covered motor vehicle," train and supervise operators, and maintain vehicles properly pertaining to the service provided by Thurston Mechanical LLC; hereafter referred to as “The Company”. A "covered motor vehicle" is a motor vehicle that is owned, leased, or rented by the company or is a driver-owned vehicle operated during work time. The Company drivers may be assigned to use a company vehicle to visit clients, make deliveries, attend meetings, pick up supplies, or to do a variety of other tasks. When driving is part of the job, like every other task, it must be done safely. Adherence to this written program can improve traffic safety performance, minimize the risk of motor vehicle incidents, and help to keep our drivers safe and our costs

as low as possible. Management leads, supports, and enforces this program; but driver input is essential for its success. The Company will comply with all Federal and State agency requirements.

RESPONSIBILITIES

Administration

The Company Safety Manager is our Motor Vehicle Safety Program Administrator. The Program Administrator coordinates the Motor Vehicle Operation Program elements for our company. This person is responsible for setting up and managing the program so that managers, supervisors, and drivers know what our company expects. The Safety Manager will examine our existing policies and practices to ensure that they encourage and do not discourage reporting and participation in our program. In this way, early reporting of motor vehicle incidents and hazards and meaningful driver participation in the program are more likely to occur. All company incentive programs are designed to reward safe motor vehicle operation (such as active participation in the program, the identification of motor vehicle hazards in the workplace, and the reporting of motor vehicle incidents early), rather than to reward drivers for having fewer or lower rates of motor vehicle incidents. The responsibility and authority to allow a driver to operate a company vehicle lies squarely on the shoulders of The Company Management Representative in charge of the keys to the vehicle that will be driven. For this program to be administratively effective, good judgment, and correct choices must be made by the person in charge of their section or group of drivers and vehicles. Prior to the assignment of any vehicle to any driver or prior to allowing a driver to drive their own vehicle on company business or the continuation of driving any vehicle, The Company or driver owned vehicle, the following will be reviewed for the criteria below.

A current valid state driver's license with no "Status Actions"; driver must be at least 18 years old or 21 years old to drive interstate vehicles, or 18 years of age or older to drive a Fleet Vehicle. A review of the driving record (3 years back initially, then annual thereafter) will be done. If the MVR indicates no violations, or the following minor violations, the driver may be considered for qualification by The Company management. They are:

- conviction of one or more minor moving violations, if no more than 6 points have been assessed
- minor accident (no injuries) Note: If the driver/operator can remove the citation by going to traffic school, The Company will take this action into consideration for final qualification of the driver.

If the driver's MVR indicates the following major violations, then the driver is NOT qualified to drive for The Company:

- Operating a vehicle under the influence of a drug or alcohol
- Implied Consent Refusal (refusal to take blood alcohol test and or urine analysis)
- Committing homicide, manslaughter, or aggravated assault with a vehicle
- Failing to stop if you are involved in a traffic accident
- Reckless driving
- Felony speeding
- License Suspension or Revocation

Notification by The Company insurance carrier that the driver is ineligible for auto insurance coverage will cause the driver to be ineligible to drive. The above-listed violations should not be considered all inclusive, and these are not the only major violations that would disqualify the worker as a driver for The Company. Management reserves the right to make the final decision as to whether the driver will be qualified to drive for The Company.

DEFINITIONS

Fleet Vehicle - Any motor vehicle a company owns or leases that is used in the normal operations of a company. Vehicles which are used in the operation of a company, but are owned by company drivers, are not fleet vehicles. Fleet vehicles include gasoline/diesel powered vehicles and alternative-fuel vehicles. Commercial driver's license (CDL) A license issued to an individual by a State or other jurisdiction of domicile, in accordance with the standards contained in this part, which authorizes the individual to operate a class of a commercial motor vehicle.
Commercial motor vehicle (CMV) - A motor vehicle or combination of motor vehicles used in commerce to transport passengers or property if the motor vehicle:

- Has a gross combination weight rating or gross combination weight of 11,794 kilograms or more (26,001 pounds or more), whichever is greater (including) towed unit(s) with a gross vehicle weight rating or gross vehicle weight of more than 4,536 kilograms (10,001 pounds), whichever is greater; or
- Has a gross vehicle rating, gross combination weight rating, gross vehicle weight or gross combination weight of 4,536 kg (10,001 lbs.) or more; or
- Is designed or used to transport more than 8 passengers for compensation or more than 15 passengers without compensation: or
- Is of any size and is used in the transportation of hazardous materials.

Gross combination weight rating (GCWR) - The value specified by the manufacturer as the loaded weight of a combination (articulated) vehicle. In the absence of a value specified by the manufacturer, GCWR will be determined by adding the GVWR of the power unit and the total weight of the towed unit and any load thereon.
Gross vehicle weight rating (GVWR) - The value specified by the manufacturer as the loaded weight of a single vehicle.
Out-of-service order (OOS) - A declaration by an authorized enforcement officer of a Federal, State, Canadian, Mexican, or local jurisdiction that a driver, a commercial motor vehicle, or a motor carrier operation, is out-of-service pursuant to FMCSR 386.72, 392.5, 395.13, 396.9, or compatible laws, or the North American Uniform Out-of-Service Criteria.
Motor vehicle - A vehicle, machine, tractor, trailer, or semitrailer propelled or drawn by mechanical power that is used on highways.

PROCEDURES

Commercial Driver Qualifications (CMV and CDL)

A person shall not drive a commercial motor vehicle unless they are qualified to drive a commercial motor vehicle. The Company shall not require or permit a driver to drive a commercial motor vehicle unless that driver is qualified to drive a commercial motor vehicle.

- A driver is qualified to drive a CMV:
    - If they are at least 18 years old or 21 years old to drive interstate vehicles.
    - Can read and speak the English language sufficiently to converse with the public, to understand highway traffic signs and signals in the English language, to respond to official inquiries, and to make entries on reports and records.
    - Can, by reason of experience, training, or both, safely operate the type of commercial motor vehicle they drive.
    - Is physically qualified to drive a commercial motor vehicle in accordance with FMCSR's Physical Qualifications and Examinations. Holds a current medical card and has provided a copy to their employer.

- Has a currently valid commercial motor vehicle operator's license issued only by one State or jurisdiction (for GVWs or GCVWs of 26,001+ lbs).
- Has prepared and furnished The Company with the list of violations or the Certificate of Violations.
- Is not disqualified to drive a commercial motor vehicle under FMCSR §391.15.
- Has successfully completed a driver's road test and has been issued a certificate of driver's road test or has presented an operator's license or a certificate of road test which we may accept as equivalent to a road test under FMCSR §391.33.

Final determination will be the responsibility of The Company Management with the advice of the Safety Manager.
All commercial drivers for The Company must always be prepared for their driving of a company CMV. There are many items, mainly documentation and proofs. Most CMV/CDL drivers will need:

- Certificate of Registration
- Hours of service records (logbook)
- Registration papers (cab cards, permits, etc.)
- Proof of insurance
- Driver's license documents and any related certificates
- Special permits for oversize and overweight loads, if required
- Hazardous materials shipping papers, and placards if required
- Fuel tax permits (IFTA)
- Bills/Invoices, etc. showing content and origin of agricultural products, if required
- Evidence of financial responsibility

Only pre-qualified and authorized drivers may operate company owned, rented, leased or their personal vehicle, used for company business.

Cell Phone Use and Texting

There shall be no cell phone usage by any company CMV/CDL drivers while operating a company vehicle unless that vehicle or the driver's phone is equipped with a "Hands-free" operating system. The commercial driver should pull over at a safe location and then return the phone call if necessary. There shall be NO TEXTING while driving by anyone operating a vehicle (Fleet or CMV); the driver shall read or create texts only when stopped and parked in a safe location for him/her and the vehicle.

Driving Safety

While it's important to understand the company vehicle safety program, as a driver, you must put safe driving techniques into practice each time you get behind the wheel. The following safe driving strategies are under the driver's control:

- Make sure the vehicle is safe to operate.
- Bring supplies you may need in case of an emergency.
- Wear your seat belt.
- Drive defensively, not aggressively.
- Pay attention to your driving and avoid distractions.
- Only drive when you're alert and fully awake.
- Never drive under the influence of alcohol, medications, or illegal drugs.

Note: Seat belts are the single most effective means of reducing deaths and serious injuries in traffic crashes.

Vehicle Inspections

Safe driving starts before you turn the ignition key. Always inspect the vehicle before you start your trip. Make sure:

- The vehicle does not have any visible damage that affects its safe operation.
- The tires are properly inflated (use the vehicle manufacturer's recommendations that are typically noted on a sticker inside the door, glove box, or trunk - the pressures stamped on the tire are not specific to the vehicle). Check the pressure when the tires are cold.
- Tires have sufficient tread depth (tread depth should be at least 1/16 inch).
- The vehicle's fluid levels are correct (oil, brake, transmission, battery, and wiper fluids).
- Belts and hoses are free of blisters, cracks, and cuts.
- The vehicle has plenty of fuel.
- The windshield wipers are in good condition and are functional.
- You are familiar with the location and operation of all the vehicle's controls; and the seat, steering wheel, and mirrors are properly adjusted.
- Headlights, brake lights, turn signals, emergency flashers, and interior lights are working.
- The seat belt is properly adjusted, and it's in good condition.
- The vehicle is equipped with an emergency kit.
- Loose objects are secured so they won't shift during a sudden stop or turn.

Plan for Emergencies

In case of a breakdown or accident, your first actions should be to move the car to a safe area, remain in the car (if there is no risk of fire or other danger), and call for help. Some basic provisions to include in an emergency supply kit can include:

- A phone and a list of emergency phone numbers.
- First aid supplies.
- Roadside warning triangles or flares (follow instructions for their safe use).
- A fire extinguisher.
- Water and food.
- Clothing (raincoat; warm clothing, hat, mittens/gloves; comfortable boots/shoes).
- Basic car maintenance tools (a flashlight with fresh batteries; battery jumper cables; a jack, lug nut wrench, and spare tire; water for the radiator; oil; windshield wiper fluid; rags; gloves; etc.)

Be Defensive

It's best to always practice defensive driving techniques. Continually check your mirrors, leave enough following distance, and keep a cushion of space around the vehicle in case you need to quickly change lanes or go onto the shoulder. Aggressive driving acts include:

- Speeding.
- Tailgating.
- Failing to signal lane changes.
- Running red lights or stop signs.
- Passing on the right.

Aside from being aggressive, taking these actions can result in getting a ticket. The best advice is to share the road - allow other drivers to merge as needed. Safely move out of an aggressive driver's way; don't become part of a conflict.

Stay focused and alert

Driving is no time to multi-task. Stay focused on the road. Drivers can be distracted by a variety of things:

- Conversations with passengers.
- Eating, drinking, or grooming.
- Tuning the radio or selecting a CD to play.
- Reading maps or directions.
- Using electronic navigation systems.
- Using a cell phone.
- Get a full night of rest before driving.
- Stop and get out of the car to stretch and walk about every two hours.
- Set a realistic goal of how many miles you can safely drive each day.
- Avoid taking medications that cause drowsiness.

What to do in Case of an Accident

Stop at Once! Check for personal injuries and send for an ambulance, if needed. Do not leave the scene but ask for the assistance of bystanders.

- If Fire or Smoke Is Present evacuate vehicle occupants to a safe location. If stalled on a railroad track, evacuate occupants to a safe location away and at a right angle from the tracks.
- If Fire, Smoke, or Spilled Fuel is Present send for the fire department. Do not leave the scene; ask a bystander to call the fire department. If possible, use a spill kit to absorb the spill.

Protect the Scene. Set emergency warning devices to prevent further injury or damage. Secure your vehicle and its contents from theft.

Secure Assistance of the police whenever possible. Record names and badge numbers. Do not leave without law enforcement presence on scene.

Record Names, Addresses, and Phone Numbers of all witnesses injured and driver(s) and their passengers, record vehicle license numbers. Take complete pictures with cell phone or camera.

Do Not Argue! Make no statement except to the proper authorities and to Management. Sign only official police reports. Do not make statements regarding the operating condition of your vehicle and do not admit fault.

Report the Incident to Your Supervisor/Safety Manager IMMEDIATELY after first aid has been given, authorities have been notified, the scene has been protected and you are able to do so.

Complete the Incident Report at the scene (or with your Supervisor ASAP) and as thoroughly as possible. Make sure the Safety Manager gets copies of all incident paperwork and related information within 24 hours.

If You Strike an Unattended Vehicle and cannot locate the owner, leave a note with your name and the company's address and phone number, get the vehicle description, VIN number and license plate number.

A motor vehicle incident is a negative occurrence that involves a "covered" motor vehicle and that caused or could have caused injury, illness, or property damage.

All motor vehicle incidents will be investigated to determine their causes and whether the incidents were preventable. Understanding the root causes of incidents and why they are happening, regardless of fault, forms the basis for eliminating them in the future.

If any of the following traffic violations occur, whether in the driver's personal vehicle (on or off company business) or while operating an owned, rented, or leased vehicle, suspension of driving or operating any vehicle will be immediate:

- Operating a vehicle under the influence of a drug or alcohol
- Implied Consent Refusal (refusal to take blood alcohol test and or urine analysis) • Committing homicide, manslaughter, or aggravated assault with a vehicle
- Failing to stop if you are involved in a traffic accident
- Reckless driving
- Felony speeding
- License Suspension or Revocation
- Cancellation of the driver's auto insurance by the driver's insurance carrier.

The above-listed violations should not be considered all inclusive, and these are not the only major violations that would suspend the driver as a driver. Management reserves the right to make the final decision. The Company follows 49 CFR Subpart C 383.33 for CMV drivers. If the driver is found to not have reported to The Company any traffic violation, suspension, or revocation of their license, by reviewing their MVR on an annual basis or as often as deemed necessary, the driver will be subjected to disciplinary action up to and including termination. It is the overall responsibility of all drivers to maintain proper and acceptable driving records and all licenses required for their position.

Drugs and Alcohol

In accordance with our Drugs and Alcohol Policy driving a company owned, rented, leased or personal vehicle on company business, while under the influence of drugs or alcohol shall result in immediate termination.

Training

Under no circumstances may a driver operate a covered motor vehicle until they have successfully completed this company's initial training on motor vehicle safety. The Company supervisor of that driver is responsible for conducting training if they assign that driver to driving duties. The Company requires a preceding state issued, driving record (Motor Vehicle Report "MVR"), for each driver-applicant operating a vehicle which is company owned, rented, or leased as well as any personal vehicle used on Company business. If the driver has an out-of-state license, they will be required to submit their MVR from that state for our review. The MVR will be reviewed by a responsible management official for determination of qualification of each driver. The Company shall also obtain an MVR on each driver thereafter on an annual basis.
Through training we ensure that motor vehicle operators are knowledgeable in practices such as The Company expectation; impaired, fatigued, aggressive, distracted, and defensive driving; seat belt use; vehicle inspection; security and motor vehicle incident procedures; cargo securement; handling hazardous materials and spills; and safety features and emergency equipment.

Driver training must include the following:

- Pre-trip safety inspection.
- Use of vehicle controls and equipment, including operation of emergency equipment.
- Operation of vehicle, including turning, backing, braking, parking, handling, and vehicle characteristics including those that affect vehicle stability, such as effects of braking and curves, effects of speed on vehicle control, dangers associated with maneuvering through curves, dangers associated with weather or road conditions that a driver may experience (e.g., blizzards, mountainous terrain, high winds), and high center of gravity;
- Procedures for maneuvering tunnels, bridges, and railroad crossings.
- Requirements pertaining to attendance of vehicles, parking, smoking, routing, and incident reporting; and
- Loading and unloading of materials, including:

    - Compatibility and segregation of cargo in a mixed load.
    - Package handling methods; and
    - Load securement.

After a driver has completed the training program, management will determine whether the driver can safely operate a motor vehicle. If the driver passes, management places a training record in the driver's personnel file or driver qualification (DQ) file.

Evaluation

Individual assigned management evaluates each trained operator to verify that the driver has retained and uses the knowledge and skills needed to operate safely. If the evaluation shows that the driver is lacking the appropriate skills and knowledge, the driver is retrained.

The Safety Manager will review motor vehicle records periodically to ensure that operators maintain a good driving record. The results of each check are made known to Human Resources.

A driver may lose their privilege to operate a company vehicle for work or operate a company-owned-leased-rented vehicle for personal use, if after an incident(s), accident(s), or after a violation(s) it was discovered to be the driver’s fault and preventable; the Safety manager may recommend the driver receive additional training if warranted. Besides all the safety issues surrounding the driving of a commercial motor vehicle, there are other safety issues that can affect a driver. Examples of these are back strain and lifting concerns; slip- trip-falls; and personal safety in parking lots and other places.

Training and policy documents have been developed to address some of these driver safety topics. It is inherent that deficiencies may occasionally arise in this Motor Vehicle Safety Program. By having our program thoroughly evaluated, periodically and as necessary, and promptly taking action to correct any deficiencies in our program, we can eliminate problems effectively. Note: The occurrence of a motor vehicle incident does not in itself mean that the program is ineffective.

All drivers have a general obligation to work and drive safely.

Road Transportation

PURPOSE

Thurston Mechanical LLC; hereafter referred to as “The Company” has created this policy to ensure all responsibilities are defined and The Company’s commitment to the safe operation of transportation vehicles. This written Motor Vehicle Safety Program establishes guidelines to ensure that we hire capable drivers, only allow eligible drivers to drive a "covered motor vehicle," train and supervise drivers, and maintain vehicles properly. A "covered motor vehicle" is a motor vehicle that is owned, leased, or rented by The Company or is a driver-owned vehicle operated during work time. A driver may be assigned to use a company vehicle to visit clients, make deliveries, attend meetings, pick up supplies, or to do a variety of other tasks. When driving is part of the job, like every other task, it must be done safely adherence to this written program can improve traffic safety performance, minimize the risk of motor vehicle incidents, and help to keep our drivers safe and our costs as low as possible. Management leads, supports, and enforces this program; but driver input is essential for its success. The Company will comply with all Federal and State agency requirements.

PROCEDURES

The Company Safety Manager or delegate is our Motor Vehicle Safety Program Administrator. The Program Administrator is responsible for ensuring all jurisdictional regulatory compliance requirements are met. The Program Administrator coordinates the Motor Vehicle Operation Program elements for our company. This Program Manager is responsible for setting up and managing the program so that managers, supervisors, and drivers know what our company expects. The Safety Manager will examine our existing policies and practices to ensure that they encourage and do not discourage reporting and participation in our program. In this way, early reporting of motor vehicle incidents and hazards and meaningful driver participation in the program are more likely to occur. For this program to be administratively effective, good judgment and correct choices must be made by the person in charge of their section or group of drivers and vehicles. Prior to the assignment of any vehicle to any driver or prior to allowing a driver to drive their own vehicle on company business or the continuation of driving any vehicle, The Company or driver owned vehicle, the following will be reviewed:

- A current valid state driver’s license with no “Status Actions”; must be at least 21 years of age to drive a CMV or 18 years of age or older to drive a Fleet Vehicle. A current medical card is required, and a copy must be provided for recordkeeping in the driver qualification files. Drivers who hold a CDL or commercial learner's permit (CLP) must provide each new certificate to their state licensing agency and carry a copy for at least 15 days after issuance, until their state driving record is updated. The Company must also have a copy of the certificate in the file for up to 15 days. By the end of those 15 days, a new Motor Vehicle Report (MVR) must be placed in the employee’s file as proof of medical certification. The medical certificate must be updated by an approved medical examiner at least once every 24 months, unless more frequently due to underlying conditions. The driver must carry the medical certificate or a copy of it on their person. Another copy must be provided to The Company to be retained in the driver’s qualification file.
- A review of the driver’s background and MVR (MVR 3 years back initially, then annual thereafter) will be done. The Company requires a preceding 3-year, state issued, driving record (MVR), for each driver-applicant operating a vehicle which is company owned, rented, or leased as well as any personal vehicle used on Company business. If the driver has an out-of-state license, they will be required to submit their MVR from that state for our review. The MVR will be reviewed by a responsible management official for determination of qualification of each driver. If the MVR

indicates no violations, or the following minor violations, the driver may be considered for qualification by The Company management. They are:

- conviction of one or more minor moving violations, as long as no more than 6 points have been assessed
- minor accident (no injuries) Note: If the driver/driver can remove the citation by going to traffic school, The Company will take this action into consideration for final qualification of the driver.

- If the driver's MVR indicates the following major violations, then the driver is NOT qualified to drive for The Company:

  - Operating a vehicle under the influence of a drug or alcohol
  - Implied Consent Refusal (refusal to take blood alcohol test and or urine analysis)
  - Committing homicide, manslaughter, or aggravated assault with a vehicle
  - Failing to stop if you are involved in a traffic accident
  - Reckless driving
  - Felony speeding
  - License Suspension or Revocation

- Notification by The Company insurance carrier that the driver is ineligible for auto insurance coverage will cause the driver to be ineligible to drive. The above listed violations should not be considered all inclusive, and these are not the only major violations that would disqualify the driver as a driver. Management reserves the right to make the final decision as to whether the driver will be qualified to drive.

Fleet Vehicle

Any motor vehicle a company owns or leases that is used in the normal operations of a company. Vehicles which are used in the operation of a company but are owned by company drivers are not fleet vehicles. Fleet vehicles include gasoline/diesel powered vehicles and alternative-fuel vehicles. Commercial driver's license (CDL) A license issued to an individual by a State or other jurisdiction of domicile, in accordance with the standards contained in this part, which authorizes the individual to operate a class of a commercial motor vehicle. All motor vehicles will be placed on a preventive maintenance and inspection program maintained per the manufacture's specifications. All maintenance reports will be retained for the duration of when the vehicle is in use. A pre and post trip inspection will be performed and documented by each driver. The driver will provide the documentation to the maintenance department as part of the recordkeeping requirements. During the pre and post trip inspections if any defects are identified the driver will alert their supervisor or maintenance department before the motor vehicle is placed back in service.

Commercial motor vehicle (CMV)

A motor vehicle or combination of motor vehicles used in commerce to transport passengers or property if the motor vehicle:

- Has a gross combination weight rating or gross combination weight of 11,794 kilograms or more (26,001 pounds or more), whichever is greater (including) towed unit(s) with a gross vehicle weight rating or gross vehicle weight of more than 4,536 kilograms (10,001 pounds), whichever is greater

- Has a gross vehicle rating, gross combination weight rating, gross vehicle weight or gross combination weight of 4,536 kg (10,001 lbs.) or more
- Is designed or used to transport more than 8 passengers for compensation or more than 15 passengers without compensation
- Is of any size and is used in the transportation of hazardous materials

Gross Combination Weight Rating (GCWR)

The value specified by the manufacturer as the loaded weight of a combination (articulated) vehicle. In the absence of a value specified by the manufacturer, GCWR will be determined by adding the GVWR of the power unit and the total weight of the towed unit and any load thereon.

Gross Vehicle Weight Rating (GVWR)

The value specified by the manufacturer as the loaded weight of a single vehicle. Out-of-service order (OOS) A declaration by an authorized enforcement officer of a Federal, State, Canadian, Mexican, or local jurisdiction that a driver, a commercial motor vehicle, or a motor carrier operation, is out-of-service pursuant to FMCSR 386.72, 392.5, 395.13, 396.9, or compatible laws, or the North American Uniform Out-of-Service Criteria.

Motor Vehicle

A vehicle, machine, tractor, trailer, or semitrailer propelled or drawn by mechanical power that is used on highways.

Commercial Driver Qualifications (CMV and CDL)

A person shall not drive a commercial motor vehicle unless he/she is qualified to drive a commercial motor vehicle. The Company shall not require or permit a person to drive a commercial motor vehicle unless that person is qualified to drive a commercial motor vehicle.

A person is qualified to drive a CMV:

- If at least 21 years old
- Can read and speak the English language sufficiently to converse with the public, to understand highway traffic signs and signals in the English language, to respond to official inquiries, and to make entries on reports and records
- Can, by reason of experience, training, or both, safely operate the type of commercial motor vehicle they drive
- Is physically qualified to drive a commercial motor vehicle in accordance with FMCSR's Physical Qualifications and Examinations
- Has a currently valid commercial motor vehicle driver's license issued only by one State or jurisdiction (for GVWs or GCVWs of 26,001+ lbs.)
- Has prepared and furnished The Company with the list of violations or the Certificate of Violations
- Is not disqualified to drive a commercial motor vehicle under FMCSR §391.15
- Has successfully completed a driver's road test and has been issued a certificate of driver's road test or has presented a driver's license or a certificate of road test which we may accept as equivalent to a road test under FMCSR §391.33

Final determination will be the responsibility of The Company Management with the advice of the Safety

Manager.

All commercial drivers must always be prepared for their driving of a The Company CMV. There are many items, mainly documentation and proofs. CMV/CDL drivers will need:

- Certificate of Registration
- Hours of service records (logbook)
- Registration papers (cab cards, permits, etc.)
- Proof of insurance
- Driver's license documents and any related certificates or endorsements, if applicable
- Special permits for oversize and overweight loads, if required
- Hazardous materials shipping papers and placards, if required
- Fuel tax permits (IFTA)
- Bills/Invoices, etc. showing content and origin of agricultural products, if required
- Evidence of financial responsibility

Only pre-qualified and authorized drivers may operate company owned, rented, leased or their personal vehicle, used for company business.

Mobile Phone Use and Texting

There shall be no mobile phone usage by any CMV/CDL drivers while operating a company vehicle unless that vehicle or the driver's phone is equipped with a "hands-free" operating system. The commercial driver should pull over at a safe location and then return the phone call if necessary. There shall be NO TEXTING while driving a vehicle (Fleet or CMV); the driver shall read or create texts only when stopped and parked in a safe location for them and the vehicle.

Two-way radios are not restricted by the DOT banning of mobile phones, push to talk communications allow for a safer communication.

Driving Safety

While it's important to understand The Company vehicle safety program, as a driver, you must put safe driving techniques into practice each time you get behind the wheel. The following safe driving strategies are under the driver's control:

- Make sure the vehicle is safe to operate
- Bring supplies you may need in case of an emergency
- Wear your seat belt
- Drive defensively, not aggressively
- Pay attention to your driving and avoid distractions
- Only drive when you're alert and fully awake
- Never drive under the influence of alcohol, medications, or illegal drugs

Note: Seat belts are the single most effective means of reducing deaths and serious injuries in traffic crashes.

Vehicle Inspections

Safe driving starts before you turn the ignition key. Always inspect the vehicle before and after your trip. Make sure:

- The vehicle does not have any visible damage that affects its safe operation
- The tires are properly inflated (use the vehicle manufacturer's recommendations that are typically noted on a sticker inside the door, glove box, or trunk - the pressures stamped on the tire are not specific to the vehicle). Check the pressure when the tires are cold
- Tires have sufficient tread depth (tread depth should be at least 1/16 inch)
- The vehicle's fluid levels are correct (oil, brake, transmission, battery, and wiper fluids)
- Belts and hoses are free of blisters, cracks, and cuts
- The vehicle has plenty of fuel
- The windshield wipers are in good condition and are functional
- You are familiar with the location and operation of all the vehicle's controls; and the seat, steering wheel, and mirrors are properly adjusted
- Headlights, brake lights, turn signals, emergency flashers, and interior lights are working
- The seat belt is properly adjusted, and it's in good condition
- The vehicle is equipped with an emergency kit
- Loose objects are secured so they won't shift during a sudden stop or turn

Plan for Emergencies

In case of a breakdown or accident, your first actions should be to move the vehicle to a safe area, remain in the vehicle (if there is no risk of fire or other danger), and call for help. Some basic provisions to include in an emergency supply kit can include:

- A phone and a list of emergency phone numbers
- First aid supplies
- Roadside warning triangles or flares (follow instructions for their safe use)
- A fire extinguisher
- Water and food
- Clothing (raincoat; warm clothing, hat, mittens/gloves; comfortable boots/shoes).
- Basic car maintenance tools (a flashlight with fresh batteries; battery jumper cables; a jack, lug nut wrench, and spare tire; water for the radiator; oil; windshield wiper fluid; rags; gloves; etc.)

Be Defensive

It's best to always practice defensive driving techniques. Continually check your mirrors, leave enough following distance, and keep a cushion of space around the vehicle in case you need to quickly change lanes or go onto the shoulder. Aggressive driving acts include:

- Speeding.
- Tailgating.
- Failing to signal lane changes.
- Running red lights or stop signs.
- Passing on the right.

Aside from being aggressive, taking these actions can result in getting a ticket. The best advice is to share the road - allow other drivers to merge as needed. Safely move out of an aggressive driver's way; don't become part

of a conflict.

Stay Focused and Alert

Driving is no time to multi-task. Stay focused on the road. Drivers can be distracted by a variety of things:

- Conversations with passengers.
- Eating, drinking, or grooming.
- Tuning the radio or selecting a CD to play.
- Reading maps or directions.
- Using electronic navigation systems.
- Using a mobile phone.
- Get a full night of rest before driving.
- Stop and get out of the car to stretch and walk about every two hours.
- Set a realistic goal of how many miles you can safely drive each day.
- Avoid taking medications that cause drowsiness.

Hours of Service

The hours of service (HOS) rule refers to the maximum amount of time drivers are permitted to be on duty including driving time, and specifies number and length of rest periods, to help ensure that drivers stay awake and alert. The Company will comply with HOS regulations found in 49 CFR 395.

Hazardous Materials Shipping

All drivers transporting hazardous will have been properly trained. Drivers are responsible for ensuring that the applicable markings/placards that are required are placed on the CMV based on jurisdictional requirements. Drivers will ensure that the proper shipping papers or manifests are properly prepared, stored and retained for the required times based on jurisdictional and company requirements.

What to do in Case of an Accident

Stop at once! Check for personal injuries and send for an ambulance, if needed. Do not leave the scene but ask for the assistance of bystanders.

- If fire or smoke is present evacuate vehicle occupants to a safe location. If stalled on a railroad track, evacuate occupants to a safe location away and at a right angle from the tracks.
- If fire, smoke, or spilled fuel is present send for the fire department. Do not leave the scene; ask a bystander to call the fire department. If possible, use a spill kit to absorb the spill.

Protect the scene. Set emergency warning devices to prevent further injury or damage. Secure your vehicle and its contents from theft, if possible.
Secure assistance of the police whenever possible. Record names and badge numbers. Do not leave without law enforcement presence on scene.
Record names, addresses, and phone numbers of all witnesses injured and driver(s) and their passengers, record vehicle license numbers. Take complete pictures with mobile phone or camera.
Do not argue! Make no statement except to the proper authorities and to Management. Sign only official police reports. Do not make statements regarding the operating condition of your vehicle and do not admit fault.
Report the incident to your supervisor/safety manager IMMEDIATELY after first aid has been given,

authorities have been notified, the scene has been protected and you are able to do so.
Complete the incident report at the scene (or with your Supervisor ASAP) and as thoroughly as possible. Make sure the Safety Manager gets copies of all incident paperwork and related information within 24 hours.
If you strike an unattended vehicle and cannot locate the owner, leave a note with your name and The Company's address and phone number, get the vehicle description, VIN number and license plate number. If possible, take a picture with your mobile phone or camera of the damage.
A motor vehicle incident is a negative occurrence that involves a "covered" motor vehicle and that caused or could have caused injury, illness, or property damage.
All motor vehicle incidents will be investigated to determine their causes and whether the incidents were preventable. Understanding the root causes of incidents and why they are happening, regardless of fault, forms the basis for eliminating them in the future.
If any of the following traffic violations occur, whether in the driver's personal vehicle (on or off company business) or while operating an owned, rented, or leased vehicle, suspension of driving or operating any vehicle will be immediate:

- Operating a vehicle under the influence of a drug or alcohol
- Implied Consent Refusal (refusal to take blood alcohol test and or urine analysis)
- Committing homicide, manslaughter, or aggravated assault with a vehicle
- Failing to stop if you are involved in a traffic accident
- Reckless driving
- Felony speeding
- License Suspension or Revocation
- Cancellation of the driver's auto insurance by the driver's insurance carrier.

The above listed violations should not be considered all inclusive, and these are not the only major violations that would suspend the driver as a driver. Management reserves the right to make the final decision. The Company follows 49 CFR Subpart C 383.33 for CMV drivers. If the driver is found to not have reported to The Company any traffic violation, suspension, or revocation of their license, by reviewing their MVR on an annual basis or as often as deemed necessary, the driver will be subjected to disciplinary action up to and including termination. It is the overall responsibility of all drivers to maintain proper and acceptable driving records and all licenses required for their position.

Drugs and Alcohol

In accordance with our Drugs and Alcohol Policy driving a company owned, rented, leased or personal vehicle on company business, while under the influence of drugs or alcohol shall result in immediate termination.

Training

Under no circumstances may a driver operate a covered motor vehicle until they have successfully completed this company's initial training on motor vehicle safety. Training can include reading material, watching a presentation, and driving with a supervisor as a ride-a-long. The supervisor of that individual is responsible for conducting training if they assign a driver to driving duties.
The Company training program includes the topics of driving that the driver will have to deal with. Through training we ensure that motor vehicle drivers are knowledgeable in practices such as impaired, fatigued, aggressive, distracted, and defensive driving; seat belt use; vehicle inspection; security and motor vehicle incident procedures; cargo securement; handling hazardous materials and spills; and safety features and emergency equipment.

Driver training must include the following:

- Pre-trip safety inspection
- Use of vehicle controls and equipment, including operation of emergency equipment
- Operation of vehicle, including turning, backing, braking, parking, handling, and vehicle characteristics including those that affect vehicle stability, such as effects of braking and curves, effects of speed on vehicle control, dangers associated with maneuvering through curves, dangers associated with weather or road conditions that a driver may experience (e.g., blizzards, mountainous terrain, high winds), and high center of gravity
- Procedures for maneuvering tunnels, bridges, and railroad crossings
- Requirements pertaining to attendance of vehicles, parking, smoking, routing, and incident reporting
- Loading and unloading of materials, including:

    - Compatibility and segregation of cargo in a mixed load
    - Package handling methods
    - Load securement

- Defensive driving including:

    - proper attitude
    - visual habits
    - proper decision making
    - road rage
    - distracted driving

- Fatigue management
- Hazardous Materials in compliance with jurisdictional requirements

After a driver has completed the training program, management will determine whether the driver can safely operate a motor vehicle. If the driver passes, management places a training record in the driver's personnel file or driver qualification file.

Evaluation

The Safety Manager evaluates each trained driver to verify that the driver has retained and uses the knowledge and skills needed to operate safely. If the evaluation shows that the driver is lacking the appropriate skills and knowledge, the driver is retrained.

The Safety Manager also reviews motor vehicle records periodically to ensure that drivers maintain a good driving record. The results of each check are made known to the appropriate departments.
A driver may lose their privilege to operate a company vehicle for work or operate a company-owned-leased-rented vehicle for personal use, if after an incident(s), accident(s), or after a violation(s) it was discovered to be the driver’s fault and preventable; the Safety Manager may recommend the driver receive additional training if warranted.

In addition to the safety issues surrounding the driving of a commercial motor vehicle, there are other safety issues that can affect a driver. Examples of these are back strain and lifting concerns; slip- trip-falls; and personal safety in parking lots and other places.

Training and policy documents have been developed to address some of these driver safety topics. It is inherent that problems may occasionally arise. By having our program thoroughly evaluated, periodically and as necessary, and promptly taking action to correct any deficiencies in our program, we can eliminate problems effectively. Note: The occurrence of a motor vehicle incident does not in itself mean that the program is ineffective.

Disciplinary Actions

The Company's progressive driver discipline policy and procedures are designed to provide a structured corrective action process to improve and prevent a recurrence of undesirable driver behavior and performance issues.

Outlined below are the potential steps of our progressive discipline policy and procedures. The Company reserves the right to combine or skip steps depending on the facts of each situation and the nature of the offense. Some of the factors that will be considered are whether the offense is repeated despite coaching, counseling, or training; the drivers work record; and the impact the conduct and performance issues have on the company, driver, or public.

Drivers who receive three unsafe driving-related complaints may be subject to mandatory training and/or disciplinary action up to and including a recommendation for termination.

- First validated complaint—Supervisor will discuss complaint with driver and give a verbal warning. Driver may be required to complete a mandatory driver training provided by Risk Management Services or his or her assigned department.
- Second validated complaint—Supervisor will discuss complaint with driver and provide driver with a written warning (summary of conference). Driver will need to complete mandatory driver training provided by their supervisor.
- Third validated complaint—Driver will need to complete mandatory driver training provided by their supervisor. Driver may receive additional disciplinary action up to and including a recommendation for termination.

At no time will aggressive driving be tolerated by any driver who is driving a company vehicle. If it is determined that a driver is exhibiting unsafe driving behavior that includes, but is not limited to, rude gestures, verbal insults, deliberately driving in an unsafe or threatening manner, or making threats, they will be removed from driving status and may receive additional disciplinary action up to and including a recommendation for termination.

Drivers are subject to disciplinary actions for being involved in three preventable vehicle accidents within a five-year period. (After five years, one accident will be removed.)

Disciplinary actions are as follows:

- First incident—Driver will receive a written warning from their supervisor, must attend defensive driving class and any retraining course required by their supervisor, and may receive additional disciplinary action up to and including a recommendation for termination.
- Second incident—Driver will be placed on an intervention plan, must attend defensive driving class and any retraining course required by their supervisor, and may receive additional disciplinary action up to and including a recommendation for termination.

- Third incident—Driver will be removed from driving status and may receive additional disciplinary action up to and including a recommendation for termination.

All drivers have a general obligation to work and drive safely.