G & W EQUIPMENT, INC.

SAFETY AND HEALTH MANUAL

Revised: November 30th, 2017

TABLE OF CONTENTS

PURPOSE

The purpose of this safety manual is to outline the safety procedures to be followed by all employees in the company, the specific duties to be followed, the equipment to be used, and the procedure for implementing and enforcing these procedures.

The essential elements of this program include: top management's commitment and involvement; the establishment and operation of safety committees; provisions for safety and health training; first aid procedures; accident investigations; recordkeeping of injuries; and workplace safety rules, policies, and procedures.

Use of all or part of this manual does not relieve employers of their responsibility to comply with other applicable local, state or federal laws.

POLICY OF TOP MANAGEMENT

The Employees of G & W Equipment, Inc. are the most important asset of the company, and management will make every effort to protect them by providing a safe and healthy workplace. It is the responsibility of both management and the employees to make this happen by identifying the specific needs that safety requires by outlining the plan for safety and supplying the necessary training, equipment, tools and protective devices. The company will voluntarily comply with the Occupational Safety and Health Act (OSHA). It is the policy of G & W Equipment, Inc., that employees report to their supervisor unsafe conditions and not perform any work tasks if the work is considered unsafe. Additionally, employees must report all incidents, accidents and injuries, regardless how minor. No such report will result in retaliation, penalty, or other disincentive.

Employee recommendations to improve safety and health conditions will be given thorough consideration by our management team including the financial resources for the correction of unsafe conditions. Similarly, management will take disciplinary action against an employee who willfully or repeatedly violates workplace safety rules. This action may include verbal or written reprimands and may ultimately result in termination of employment.

The primary responsibility for the coordination, implementation, and maintenance of our workplace safety program has been assigned to:

Name: Michael Sabbagh
Title: President
Telephone: 704-394-6316

Senior management will be actively involved with employees in establishing and maintaining an effective safety and health program, which include:

- Promoting safety committee participation;
- Providing safety and health education and training; and
- Reviewing and updating workplace safety rules.

This policy statement serves to express management's commitment to and involvement in

providing our employees a safe and healthful workplace. This workplace safety program will be incorporated as the standard of practice for this organization. Compliance with the safety rules will be required of all employees as a condition of employment.

SAFETY COORDINATOR

Each Branch Manager shall appoint a Safety Coordinator, who will be designated as the focal point for all matters pertaining to employee safety and health. He/she will coordinate developing of the safety program and the enforcement and implementation of the policies. He/she will continually monitor the progress of this plan to control accidental losses and keep top management informed on both the progress being made and problems that develop.

SAFETY COMMITTEE

A safety committee has been established as a management tool to recommend improvements to our workplace safety program and to identify corrective measures needed to eliminate or control recognized safety and health hazards.

Each Branch with more than ten (10) employees, who are regularly located at one site, shall have a safety committee consisting of the safety coordinator and two (2) other non-management personnel. Members shall be appointed by management from a pool of employees who express interest in safety.

The safety committee employer representatives will not exceed the amount of employee representatives. Members shall serve two-year terms and are eligible for reappointment.

Responsibilities

The safety committee will be responsible for:

- Assisting management in communicating procedures for evaluating the effectiveness of control measures used to protect employees from safety and health hazards in the workplace.

- Assisting management in reviewing and updating workplace safety rules based on accident investigation findings, any inspection findings, and employee reports of unsafe conditions or work practices; and accepting and addressing anonymous complaints and suggestions from employees.

- Assisting management in updating the workplace safety program by evaluating employee injury and accident records, identifying trends and patterns, and formulating corrective measures to prevent recurrence.

- Assisting management in evaluating employee accident and illness prevention programs, and promoting safety and health awareness and co-worker participation through continuous improvements to the workplace safety program.

- Participating in safety training and be responsible for assisting management in monitoring workplace safety education and training to ensure that it is in place, that it is effective, and that it is documented.

Management will provide written responses to safety committee written recommendations.

Meetings

Safety committee meetings are held quarterly and more often if needed and each committee member will be compensated at his or her hourly wage when engaged in safety committee activities.

Minutes will be kept for each meeting. A sample Safety Meeting Minutes form can be found in the Forms, Posters and Reports section of this manual. Management will be available to all employees by posting on the bulletin board in the employee break room.

All safety committee records will be maintained for not less than three (3) calendar years.

Branch Managers
Ensure that all jobs and tasks have been evaluated and hazards appropriately addressed. Where possible, hazards will be controlled before the use of PPE is implemented.

Controls include:

- Elimination of a product or process that generates the hazard
- Substitution of a non-hazardous or less-hazardous material or chemical Engineering methods such as ventilation or guarding
- Administrative controls such as procedures or task rotation
- Select the appropriate controls to reduce or eliminate hazards, based on the types of tasks and activities performed.
- Write operating procedures for tasks or activities that require controls, or include control requirements in existing work and task procedures.
- Maintain control measures and equipment.
- At least annually, assess the needs for continued (or additional) use of control measures and their requirements. These assessments should be documented as proof that controls are or are not required for certain tasks or activities. Documentation in the procedure is adequate to fulfill this need, however any specific testing or monitoring results will need to be documented and maintained separately.
- Assist in providing assessment and documentation of job hazards, as needed or required.
- Conduct JHAs at client locations prior to the commencement of any non-routine task.
- Conduct accident investigation of injuries, including those resulting from improper lifting or musculoskeletal disorders (MSD) due to ergonomic issues associated with work station configurations. Part of the root cause analysis will include interacting with employees at that particular station and determining if set up and proximity to tools, materials, supplies, etc. satisfy their range of motion, level of comfort, posture and lighting.

Procedure:

Hazard Evaluation and Determination

- Ensure JHA's have been completed. The JHA should be documented, to facilitate a later review of the process or activity hazards.
- JHA's shall be performed in all areas to identify hazards that require the use of hazard controls (including PPE requirements). Priority may be given to areas or tasks with higher injury/risk potential.
- A JHA or other hazard assessment must be completed before any non-routine task (task not evaluated as part of the current hazard assessments) is started and before changes are made to operating procedures and when incidents result from inadequate controls or PPE. This would include work station design to address any ergonomic concerns.

JHA Process

- Prioritize readily hazardous processes and perform a JHA on these tasks and activities first.
- Form a team to look at the process (at least two people, frequently more, depending upon the hazards and risks)
- JHA's are conducted by listing the job steps, determining the hazards presented by each step and determining control methods (including PPE) to use to eliminate or reduce the hazard levels.

Corrective actions may be required or recommended, based on the type of task or activities evaluated.

JHA Prioritization

- JHA's assist in providing early recognition of hazards that may cause an injury or occupational illness, or environmental harm. Although all jobs and tasks should eventually undergo a JHA, any higher hazard jobs should be prioritized to reduce the likelihood of injury or illness.
- Jobs where injuries have previously occurred, or have a high frequency of injury, illness, environmental harm or equipment damage, should be first priority.
- Second priority would be jobs that have a high potential for accidents due to the frequent use of hazardous materials or equipment, or those that have a history of "near misses".
- Third priority would be new jobs or tasks that involve the introduction of new equipment, tools, chemicals or materials, or that have changes in the process of how to perform the job or have regulations that guide the method in which the job is performed.

Conducting the JHA

- List the Basic Job Steps - Nearly every job can be broken down into steps. Each step should be observed by the JHA team. The steps should be discussed, so that everyone understands them, and the reasons the steps are included. The steps should be listed in order of performance. (The JHA form at the end of this module can be used for this, or another form of your choosing.) Action words should be used to describe the steps and they should be numbered sequentially.
- There are typically between 3 and 12 steps in a JHA. If there are fewer, then the scope of the JHA is too broad and some hazards may be overlooked. If there are more than 12 steps then the JHA is too detailed, and the JHA team may get "bogged down" with more detail than they need.

Determine the Potential Hazards
Hazards are then determined by asking questions such as:

1. Can the employee receive a strain or sprain due to bending, twisting, lifting while performing any of the steps?
2. Can the employee receive a crushing injury (be caught in, on or between equipment)?
3. Can the employee receive a burn or irritation due to contact with chemicals, heat, or other physical or biological hazards?
4. Could a chemical or material release occur?

List the Existing and Potential Hazards

- Make Recommendations to Reduce/Eliminate or Control Hazards - Where possible, eliminate the hazard, or substitute a non-hazardous material or condition that will achieve quality results. Where hazards cannot be eliminated, provide engineering controls (barriers, interlocks, tools, etc.) that can reduce or eliminate hazardous conditions. Administrative control (procedures, training, limit the exposure time, etc.) should be applied to the task where elimination and engineering are not feasible. When all the previous controls cannot provide hazard reduction, personal protective equipment (PPE) should be considered (i.e., gloves, respirators, specialized clothing, etc.). PPE should be the last control considered. Remember that PPE frequently requires specialized training, cleaning, or maintenance, and records may need to be kept.
- Make recommendations for every hazard identified, beginning with the first hazard listed. You can make several recommendations for one hazard, bearing in mind that one or more may not be feasible, cost effective or timely. Number each recommendation in accordance with its hazard. Recommendations should be specific (what type of gloves, what specific material will be substituted, etc.). Existing controls may already control or eliminate some hazards, be sure to list these, so they do not get changed and make the hazardous situation worse. Where needed, consider that some regulations require specific types of controls to be put in place, and if they are prescribed they may not be the most feasible or economical to implement.

GENERAL SAFETY RULES

1. All service technician employees must wear uniforms and safety shoes at all times. Safety glasses and earplugs must be used in specified areas and for certain tasks involving loud noises; such as, but not limited to using the bench grinder, using a hand grinder, welding, and using a pneumatic impact tool.

2. NO ONE OTHER THAN EMPLOYEES IS ALLOWED IN THE SHOP/WAREHOUSE WITHOUT THE ACCOMPANIMENT OF A G&W EMPLOYEE.

3. It is the responsibility of ALL employees to alert management of any unsafe practices or machinery as soon as it is discovered so that corrective action can be taken as soon as possible. It is also the responsibility of management to alert employees of any unsafe practice it discovers and to stop the practice immediately.

4. From time to time, there will be training sessions that attendance will be required by each employee.

5. All employees will be required to sign for his/her safety equipment and be responsible for its care and maintenance.

6. IF AT ANY time an unsafe condition appears, STOP working, REMOVE yourself from the hazardous situation and notify management of the problem. Do not continue working until the potential unsafe condition is addressed and corrected.

7. No employee is required to perform what he/she believes to be an unsafe act. Contact the Safety Coordinator or the Company President, if your supervisor insists that you perform the unsafe act.

8. Although this manual primarily addresses shop safety, all appropriate requirements and actions within this document will also be followed by delivery, office, technical and sales personnel.

9. The Personnel Department will keep an individual log of all equipment and formal training each employee has received in each employee's personnel file.

10. Periodic Fire Drills and Tornado Drills will be conducted in accordance with the Company's Emergency Action Plan.

11. If Company supplied safety equipment is misplaced, lost, or abused, the employee may be asked to contribute to the cost of replacement.

12. The Company maintains a file of Safety Data Sheets for your inspection. At any time, any employee has the right to review any of these files and management promotes interest and will answer any questions. Also available are policies covering hazardous chemicals.

13. Alcohol and any illegal drug use are specifically prohibited on the premises. Prescription drugs that may affect your work should be taken under the guidance of a physician.

14. Firearms and all other weapons are prohibited on Company property.

15. In case of fire, chemical spill, tornado, or other natural or man-made disaster, all employees should follow the Company's Emergency Action Plan.

16. Promptly report all accidents and incidents to your supervisor even when an injury is not readily apparent. In order to comply with Worker's Compensation regulations, all work-related accidents must be reported within 24 hours.

17. A Hazard Assessment of all Company tasks and activities to determine the hazard or risk and what personal protective equipment (PPE) is necessary to protect the employee from injury. Employees are required to wear the PPE's prescribed for each job and ensure that it is in fully serviceable condition before commencing work.

18. Smoking is only allowed in those areas designated for smoking.

19. Employees are allowed to operate only those machines on which they have been

certified as being proficient by your supervisor.

20. Within each facility, potable drinking water and restroom facilities are provided for our clients. Particularly during exceedingly hot or humid months, employees are encouraged to drink plenty of water to maintain adequate hydration.

SAFETY AND HEALTH TRAINING

Workplace safety and health orientation begins on the first day of initial employment or job transfer. During the initial orientation of current and new employees, management will ensure that each person is fully capable of coping with all potential emergencies and is aware of job related hazards. An employee is not to work without direct, immediate supervision until this is done.

Each employee will be provided a copy of this Company Safety and Health Manual during orientation, which shall be reviewed by the Safety Coordinator and/or Supervisor with the employee. Supervisors will ask questions of employees and answer employees' questions to ensure knowledge and understanding of safety rules, policies, and job-specific procedures described in this manual. All employees will be instructed that compliance with the safety rules described in this manual is required.

Safety and Health Committee members and supervisors will receive additional training on the Company's safety and health program, hazard recognition, hazard correction and control, and the rights and responsibilities of the safety committee as outlined elsewhere in this manual. The Safety Coordinator will facilitate all safety and health training necessary and retain all written plans necessary to maintain an ongoing effective safety and health program.

Job-Specific Training

- Supervisors will initially train employees on how to perform assigned job tasks safely.
- Supervisors will carefully review with each employee the specific safety rules, policies, and procedures that are applicable and that are described in the workplace safety manual.
- Supervisors will give employees verbal instructions and specific directions on how to do the work safely.
- Supervisors will observe employees performing the work. If necessary, the supervisor will provide a demonstration using safe work practices, or remedial instruction to correct training deficiencies before an employee is permitted to do the work without supervision.
- All employees will receive safe operating instructions on seldom-used or new equipment before using the equipment.
- Supervisors will review safe work practices with employees before permitting the performance of new, non-routine, or specialized procedures.

Periodic Retraining of Employees

All employees will be retrained periodically on safety rules, policies and procedures, and when changes are made to the workplace safety manual.

Individual employees will be retrained after the occurrence of a work-related injury caused by an unsafe act or work practice, and when a supervisor observes employees displaying unsafe acts, practices, or behaviors.

EMERGENCY ACTION PLAN

Consistent with OSHA requirements, a copy of an Emergency Action Plan, unique to each location, will be kept on file and made accessible to all employees for review. In order to comply with 29 CFR 1910 Subpart E, the following emergency procedures are to be followed by employees of G & W Equipment, Inc.

A copy of this procedure will be reviewed by all employees. A copy of the procedures may be obtained from the Safety Coordinator.

The program will be updated when new plan procedures or training are introduced into the working environment and it will be reviewed annually.

Plan Implementation

Safety Coordinator shall be the person in charge during an emergency at G & W Equipment, Inc. He shall have attended hazardous waste and fire safety training classes and is familiar with all materials and equipment within the facility.
Responsibilities will include but not limited to:

1. Keep current all records and provide annual training to all emergency squad members.

2. Perform a periodic drill to inform all employees of proper actions to be taken.

3. Determine if outside assistance is needed and make the necessary calls.

4. Be made available to all employees who may need more information about this plan, assignment of responsibilities, implementation or whenever it is revised.

Evacuation Coordinator will:

1. Monitor safe exits and account for all personnel.

2. Assure all fire routes are kept open.

3. Report to the Safety Coordinator when all personnel are accounted for.

Hazardous Material Coordinator shall:

1. Attend waste management training classes and understand the laws pertaining to

hazardous materials.

2. Assure that all containers are properly labeled and marked.

Emergency Squad shall:

1. Assure all natural gas and electrical services are controlled.

2. Assure proper testing of sprinkler systems.

3. Be properly versed on firefighting abilities not to exceed their training.

Fire Protection Equipment and Extinguisher Usage:

Every building of each of our facilities is equipped with an electrically managed, manually operated fire alarm system. When activated, the system will sound alarms that can be heard above the ambient noise levels throughout the workplace. The fire alarm will also be automatically transmitted to the fire department. Any fire suppression or fire detection system will automatically actuate the building alarm system.

Portable fire extinguishers are placed in each of the buildings. Fire extinguishers must be kept fully charged and in their designated places. The extinguishers will not be obstructed or obscured from view. A map indicating the locations of all fire extinguishers for each facility will be posted so that employees can identify their location. The fire extinguishers will be inspected by the Branch Manager, at least monthly, to make sure that they are in their designated places, have not been tampered with or actuated, and are not corroded or otherwise impaired. Each extinguisher should have an attached inspection tags which shall be initialed and dated each month when it is inspected. The location of all hydrants, hose houses, portable fire extinguishers, or other fire protective equipment should be properly marked with arrows and signs painted on the pavement.

In the event of a fire or related emergency, all employees will exit the facility. The Branch Manager or his designated assistant will ascertain if the fire can be contained or controlled with the fire extinguisher located in close proximity to the fire. Using the PASS Method (Pull pin, Aim nozzle, Squeeze level and Sweep at the base of the fire), the employee will attempt to extinguish an incipient fire. It is important to have an escape route and be aware of combustion products that might result from the flames, if they begin to grow and spread.

Training in the proper use of the fire extinguisher will take place on a yearly basis and will be documented.

First Aid Responders, Training and Kits:

In the event an employee is injured on the job, first aid kits are available for them to treat their own injuries. In the event of a serious injury, “911” or medical response will be summoned. No employee is required to treat another person's wounds. However, in the event "Good Samaritan" assistance is rendered, the exposed employee and victim will be evaluated by our medical doctor or clinic for blood borne pathogen exposure control within 24 hours after exposure. For each facility, two predetermined employees have been trained under guidelines established with the American Red Cross for techniques associated in adult CPR, use of an

automated external defibrillator and basic first aid. Copies of current certifications are in the position of those assigned as first responders. David Sabbagh has a complete copy of all recent American Red Cross certifications.

Stocking and re-supplying first aid kits will fall under the responsibility of each branch manager. Consistent with OSHA requirements laid down in 1910.151(b), “Adequate first aid supplies shall be readily available.” branch managers will periodically inspect these kits to ensure that adequate supplies are readily available.

Hazardous Material Labels

1. Flammable materials marked with red labels.

2. Oxidizer marked with red labels.

3. Health hazard marked with blue labels.

Fire & Evacuation Procedure:

In case of fire or emergency, the person who sees the fire or emergency shall go to the telephone and page "Safety Coordinator to Location".

At this time, the Safety Coordinator will go to the site to determine the appropriate action to be taken; evacuation, 911, etc. If evacuation is needed, the Evacuation Coordinator assumes this responsibility. Notification to all employees at the facility will occur through an intercom notification. If employees are off-site, a text message will be relayed to them notifying them of an emergency at their location.

When the public assistance group arrives, they will be directed to the site by the Safety Coordinator. When the emergency has been cleared, the all-clear sign will be given to management from emergency assistance personnel for the employees to be returned to the facility.

During evacuation, the point of gathering will be in the grassy area directly in front of the facility near the road, unless the emergency requires an evacuation site a farther distance or direction from the facility such as may be the case if a gas leak occurs inside the facility. The Evacuation Coordinator will call roll and account for all employees and report to the Safety Coordinator.

In addition, the Safety Coordinator will coordinate with the Branch Manager to determine who will remain on site to shut down critical operations, e.g. electrical and gas utilities, back up any important data on the server, conduct a final sweep of the facility to account for all personnel. After these actions have taken place, the Safety Coordinator will secure the building and leave the premises.

FIRST AID PROCEDURES

Minor First Aid Treatment

First aid kits are kept in the front office and on the wall outside of the employee lounge. If you sustain an injury or are involved in an accident requiring minor first aid treatment:

- Inform your supervisor.
- Administer first aid treatment to the injury or wound.
- If a first aid kit is used, indicate usage on the accident investigation report.
- Access to a first aid kit is not intended to be a substitute for medical attention.
- Provide details for the completion of the accident investigation report.

Non-Emergency Medical Treatment

For non-emergency work-related injuries requiring professional medical assistance, management must first authorize treatment. If you sustain an injury requiring treatment other than first aid:

- Inform your supervisor.
- Proceed to the posted medical facility. Your supervisor will assist with transportation, if necessary.
- Provide details for the completion of the accident investigation report.

Emergency Medical Treatment

If you sustain a severe injury requiring emergency treatment:

- Call for help and seek assistance from a co-worker.
- Use the emergency telephone numbers and instructions posted next to the telephone in your work area to request assistance and transportation to the local hospital emergency room.
- Provide details for the completion of the accident investigation report.

First Aid Training

Each employee will receive training and instructions from his or her supervisor on our first aid procedures.

FIRST AID INSTRUCTIONS

In all cases requiring emergency medical treatment, immediately call, or have a co-worker call, to request emergency medical assistance.

WOUNDS:

- Minor: Cuts, lacerations, abrasions, or punctures
  - Wash the wound using soap and water; rinse it well.
  - Cover the wound using clean dressing.

- Major: Large, deep and bleeding
  - Stop the bleeding by pressing directly on the wound, using a bandage or cloth.
  - Keep pressure on the wound until medical help arrives.

BROKEN BONES:

- Do not move the victim unless it is absolutely necessary.
- If the victim must be moved, "splint" the injured area. Use a board, cardboard, or rolled newspaper as a splint.

BURNS:

- Thermal (Heat)
- Rinse the burned area, without scrubbing it, and immerse it in cold water; do not use ice water.
- Blot dry the area and cover it using sterile gauze or a clean cloth.
- Chemical
- Flush the exposed area with cool water immediately for 15 to 20 minutes.

EYE INJURY:

- Small particles
- Do not rub your eyes.
- Use the corner of a soft clean cloth to draw particles out, or hold the eyelids open and flush the eyes continuously with water.
- Large or stuck particles
- If a particle is stuck in the eye, do not attempt to remove it.
- Cover both eyes with bandage.
- Chemical
- Immediately irrigate the eyes and under the eyelids, with water, for 30 minutes.

NECK AND SPINE INJURY:

- If the victim appears to have injured his or her neck or spine, or is unable to move his or her arm or leg, do not attempt to move the victim unless it is absolutely necessary.

HEAT EXHAUSTION:

- Loosen the victim's tight clothing.
- Give the victim "sips" of cool water.
- Make the victim lie down in a cooler place with the feet raised.

ACCIDENT INVESTIGATION

Accident Investigation Procedures

An accident investigation will be performed by the supervisor at the location where the accident occurred. The safety coordinator is responsible for seeing that the accident investigation reports are being filled out completely, and that the recommendations are being addressed. These will be brought before the Safety Committee for discussion, comment and final action. Supervisors will investigate all accidents, injuries, and occupational diseases using the following investigation procedures:

- Prior to arriving to the accident scene, the following items will be collected as part of an "Accident investigation kit". These include; writing equipment such as pens/paper, measurement equipment such as tape measures and rulers, cameras, small tools, audio recorder, PPE, marking devices such as flags, equipment manuals, etc. In the event of the presence of bodily fluids, investigators will wear the appropriate PPE, e.g. gloves, safety glasses and respirator.

- Implement temporary control measures to prevent any further injuries to employees.

- Review the equipment, operations, and processes to gain an understanding of the accident situation. Insofar as the collection of evidence, the following items will be collected, identified and preserved for further review by the Safety Committee, insurance investigators or state regulatory officials: written statements of involved individuals, witnesses, supervisor, etc., relative positions of equipment, parts, and papers. These will need to be secured, and collected through notes, photographs, witness statements, flagging, and impoundment of documents, tools, training records and equipment.

- Identify and interview each witness and any other person who might provide clues to the accident's causes.

- Investigate causal conditions and unsafe acts; make conclusions based on existing facts. It is important to identify the root cause of the accident, and not get too distracted by direct or indirect causes.

- Complete the accident investigation report.

- Provide recommendations for corrective actions to the Safety Committee who will determined the need for additional or remedial safety training, changes in procedures or the need to purchase new equipment or new PPE.

Accident investigation reports must be submitted to the safety coordinator within 24 hours of the accident.

In the event that the accident resulted in a fatality, NCDOL-OSH Division will need to be contacted within eight (8) hours. The telephone number is 1-800-625-2267 (statewide) or 919-779-8560 (within Raleigh).

After working hours (5 p.m. to 8 a.m.), weekends or holidays, call State Capitol Police at 919-733-3333 (statewide and within Raleigh).

For any work-related in-patient hospitalization of one or more employees, any work-related amputation, and any work-related loss of an eye, NCDOL-OSH Division will need to be contacted within 24 hours of the incident. The number to call is 1-800-625-2267 (statewide) or 919-779-8560 (within Raleigh). There is an online reporting form that may be used from their website: http://www.nclabor.com/osha/compliance/accident_reporting_form.pdf .

As part of annual required training, all Branch Managers and Safety Committee members will undergo "Accident Investigation" training. This will include a lecture, role play and documentation to be completed. An attendance sheet will be maintained afterwards.

ACCIDENT INVESTIGATION REPORT

REPORT #_____

COMPANY:_____ ADDRESS:_____

1. Name of injured:_____ S.S. #:_____
2. Sex [ ] M [ ] F Age:_____ Date of accident:
3. Time of accident:_____ a.m. _____ p.m. Day of accident:
4. Employee's job title:
5. Length of experience on job:_____(years)_____(months)
6. Address of location where the accident occurred:_____
7. Nature of injury, Injury type, and Part of the body affected:_____
   _____
8. Describe the accident and how it occurred:_____

9. Cause of the accident:_____
10. Was personal protective equipment required? [ ] yes [ ] no
    Was it provided? [ ] yes [ ] no
    Was it being used? [ ] yes [ ] no If "no", explain._____
    _____
    Was it being used as trained by supervisor or designated trainer? [ ] yes [ ] no
    If "no", explain._____

11. Witness(es):_____
12. Safety training provided to the injured? [ ] yes [ ] no If "no", explain._____
    _____
13. Interim corrective actions taken to prevent recurrence:_____
    _____
14. Permanent corrective action recommended to prevent recurrence:_____
    _____

Date of report:_____ Prepared by:_____

Supervisor (Signature)
Date:_____

15. Status and follow-up action taken by safety coordinator:_____
    _____

Safety Coordinator (Signature)_____
Date:_____

INSTRUCTIONS FOR COMPLETING THE ACCIDENT INVESTIGATION REPORT

An accident investigation is not designed to find fault or place blame but is an analysis of the accident to determine causes that can be controlled or eliminated.

(Items 1-6) Identification: This section is self-explanatory.

(Item 7) Nature of Injury: Describe the injury, e.g., strain, sprain, cut, burn, fracture. **Injury Type**: First aid -injury resulted in minor injury/treated on premises; Medical - injury treated off premises by physician; Lost time -injured missed more than one day of work; No Injury - no injury, near-miss type of incident. **Part of the Body**: Part of the body directly affected, e.g., foot, arm, hand, head.

(Item 8) Describe the accident: Describe the accident, including exactly what happened, and where and how it happened. Describe the equipment or materials involved.

(Item 9) Cause of the accident: Describe all conditions or acts which contributed to the accident, i.e.:
a. unsafe conditions - spills, grease on the floor, poor housekeeping or other physical conditions.

b. unsafe acts - unsafe work practices such as failure to warn, failure to use required personal protective equipment.

(Item 10) Personal protective equipment: Self-explanatory

(Item 11) Witness(es): List name(s), address(es), and phone number(s).

(Item 12) Safety training provided: Was any safety training provided to the injured related to the work activity being performed?

(Item 13) Interim corrective action: Measures taken by supervisor to prevent recurrence of incident, i.e., barricading accident area, posting warning signs, shutting down operations.

(Item 14): **Permanent corrective action**: Measures taken by supervisor to prevent recurrence of incident, i.e., barricading accident area, posting warning signs, shutting down operations.

(Item 15): **Follow-up**: Once the investigation is complete, the safety coordinator shall review and follow-up the investigation to ensure that corrective actions recommended by the safety committee and approved by the employer are taken, and control measures have been implemented.

INCIDENT REPEATER POLICY

It is the policy of G&W Equipment, Inc., that we provide to our employees a safe work environment. It is the belief of G&W Equipment, Inc. that accidents are preventable and that when both management and the work force work together to minimize workplace exposures and practice safe behavior, life and limb can be preserved.

In the unfortunate event that a workplace injury or a documented near miss occurs due to unsafe behavior on the part of an employee's own actions, G&W Equipment, Inc. will take the following measures to prevent a reoccurrence by the same employee:

1. The appropriate management staff member will review with the employee how the accident investigation identified the cause of the accident or documented near miss as unsafe behavior.

2. Management will then discuss with the employee the appropriate safe work practice expected of the employee to fulfill the task accident free in the future.

3. Both the employee and the management staff member will form an agreement by filling out the Acknowledgement & Confirmation of the Incident Repeater Program.
   If an employee has a second accident or documented near miss that occurs within 36 months due to another unsafe act, then management and the employee will follow the same three steps outlined above. However, this time the employee will be informed that this is their second unsafe act that resulted in an injury or a documented near miss during their employment. It is imperative that employees are properly instructed and retrained by management following each and every accident or documented near miss, especially those that are caused by unsafe behavior by an employee.

In the event an employee sustains three or more work related injuries or documented near misses in total, due to their own unsafe behavior, regardless of the time span between injuries / documented near misses, all of the steps outlined above will be executed again by the responsible employee and the appropriate management staff member. It is the policy of G&W Equipment, Inc. that safe work behavior is a condition of employment and unsafe acts may result in termination.

The company reserves the right to skip any process or procedure contained in this policy based upon the particular circumstances and severity of the matter and discipline an employee, up to and including termination, for any unsafe acts or safety violations as it deems appropriate.

Employee awareness to work safely is the goal of this policy as well as ensuring that management staff members are exercising their responsibility to prevent unsafe employee behavior.

RECORDKEEPING PROCEDURES

Recordkeeping Procedures

The safety coordinator will control and maintain all employee accident and injury records. Records are maintained for a minimum of three (3) years and include:

- Accident Investigation Reports,
- Workers' Compensation First Report of Injury Form, and
- Log & Summary of Occupational Injuries and Illnesses OSHA 300 Log.

SAFETY RULES, POLICIES, AND PROCEDURES FOR THE USE OF PPE

Consistent with OSHA regulations regarding a Job Hazard Analysis, the following section addressed jobsite hazards and how these are mitigated and/or eliminated through the proper use of personal protective equipment (PPE). As part of this OSHA requirement, a Job Hazard Analysis will be reviewed and certified by the Branch Manager, and all employees will sign it, attesting that they have been made aware of jobsite related hazards and control methods that will be enforced to reduce these hazards. The use of PPE is a condition of employment.

The safety rules, policies, and procedures contained on these pages have been prepared to protect you in your daily work. Employees are to follow these rules, review them often and use good common sense in carrying out assigned duties.

On an annual basis this Job Hazard Analysis will be reviewed by all employees, the Branch Manager and Shop Foreman. Each individual will sign on a corresponding acknowledgement sheet, certifying that they have been made aware of the jobsite related hazards and that they will use the corresponding PPE to mitigate these hazards. Part of the associated training will include the proper use of the PPE, its care and maintenance. This certification will be dated and recognized as the required hazard assessment certification.

The use of personal protective equipment (PPE) will be enforced by the Branch Manager and Shop Supervisors at each facility. All PPE to be used by Service Techs will be provided free of charge to employees. If an employee has their own particular PPE, e.g. hardhat or safety glasses, this item will be inspected and deemed appropriate by the Branch Manager before the employee can begin to use it in the performance of their work related duties. If, at any time, PPE, either company issued or employee supply, is found to be defective, it will be removed from service. The employee will then consult with the Branch Manager or Shop Foreman to have the item(s) replaced.

Eye Protection Policy

Safety Glasses will be worn when dust or debris is present in the general vicinity of the employee (side shields required for employees with glasses).

Safety glasses or goggles will be worn whenever cutting, striking or drilling tools are being used

(side shields or oversized goggles required for employees with glasses).

Safety goggles will be worn while sanding body work (side shields with face shield or oversized goggles required for employees with glasses).

Safety goggles and face shield will be worn while using handheld grinders, bench grinders, or any type of metal cutting tool (side shields or oversized goggles and face shield required for employees with glasses).

Safety goggles and face shield will be worn while filling or acid adjusting batteries (side shields and face shield required for employees with glasses).

Failure to use proper eye protection as indicated will result in a written warning for the first offense and possible termination for any repeat offense.

Foot Protection Policy

G & W Equipment makes available a variety of personal protective equipment (PPE) to protect employees from industrial hazards. This policy outlines general the organization's policies on PPE and the requirements for obtaining employer reimbursement for protective footwear. Management will evaluate hazards, if any, that may require the use of PPE such as protective footwear and will designate the types of PPE that will protect against these hazards.
In general, employees must wear protective footwear when working in areas where there is the danger of foot injuries due to falling or rolling objects, or the danger of objects piercing the sole, and where employees' feet are exposed to electrical hazards.

Management will arrange to train each employee in the proper and correct use of PPE, proper care and maintenance of the PPE, and useful life of the equipment.
Training will include:

- When PPE is necessary;
- Which PPE is necessary;
- How to properly don, doff, adjust, and wear PPE;
- The limitations of the PPE; and
- Proper care, maintenance, useful life, and disposal of PPE.

The supervisor will certify the names of employees who have received the training, the date(s) of the training, and the employee acknowledgment in writing that he/she has received and understands the training.

REQUIREMENTS FOR OBTAINING PROTECTIVE FOOTWEAR
The employee must regularly work in an area that has been designated by the Safety Committee as an area where the wearing of protective footwear is required, or the employee must have a job that requires the wearing of protective footwear.
The protective footwear must fulfill specifications laid out in the ANSI Z-41. The specific type of protective footwear that are appropriate for a particular area or type of operation has been determined by the Safety Committee.

ELIGIBILITY FOR REIMBURSEMENT OF FOOTWEAR EXPENSE
All full-time employees whose work requires the wearing of protective footwear will be eligible for reimbursement.

POLICY LIMITATIONS

The Safety Committee has determined the amount of company reimbursement for protective footwear to not exceed $80 annually.

The company's reimbursement will be limited to no more than one pair of protective footwear per year. Deviations from this limitation will be determined on a case-by-case basis. Protective footwear must be returned to a Safety Committee member before replacement will be authorized.

NOTE: Protective footwear must comply with the following standard of the American National Standards Institute: ANSI Z41.

EMPLOYEE RESPONSIBILITY

The employee will be responsible for the difference between the cost of the protective footwear and the amount of company reimbursement for that footwear.

The employee will be responsible for the reasonable care and maintenance of his or her protective footwear.

The employee will be responsible for wearing the protective footwear during working hours.

General Safety

Housekeeping

1. Do not place materials such as boxes or trash in walkways and passageways.
2. Sweep up shavings from around equipment such as drill presses or lathes by using a broom and a dust pan.
3. Mop up water around drinking fountains and drink dispensing machines immediately.
4. Do not store or leave items on stairways.
5. Do not block or obstruct stairwells, exits or accesses to safety and emergency equipment such as fire extinguishers or fire alarms.
6. Do not block the walking surfaces of elevated working platforms, such as scaffolds, with tools or materials that are not being used.
7. Straighten or remove rugs and mats that do not lie flat on the floor.
8. Remove protruding nails or bend them down into the lumber by using a claw hammer.
9. Return tools to their storage places after using them.
10. Do not use gasoline for cleaning purposes.
11. Use caution signs or cones to barricade slippery areas such as freshly mopped floors.

Aisles

1. Aisles should be clearly marked.
2. Aisles should be clear of obstructions.
3. Aisles should be as wide as possible to allow free and unobstructed passage during material handling.

Lighting

1. Ensure the illumination level is sufficient for the work performed.
2. Emergency lighting should be fully operational and provide adequate illumination around exits to evacuate the building.

Ventilation

1. Ensure adequate ventilation for the work being performed.
2. Appropriate maintenance schedule established and used.
3. Do not use fans that have excessive vibration or frayed cords.
4. Do not place floor type fans in walkways, aisles or doorways.
5. Fans blades should be guarded if below 7 feet above the floor or if contact with the blades can be made.
6. Grill holes <1/2" square.

Exits and Emergency Evacuation

1. Designate an adequate number of exits for emergency escape.
2. Do not allow any exits to become locked or barred to restrict escape.
3. Emergency exits should be illuminated adequately.
4. Do not store flammable materials adjacent to exit areas.
5. Post written emergency evacuation plans and maps adjacent to all exits.

Lifting Procedures

1. Plan the move before lifting; ensure that you have an unobstructed pathway.
2. Test the weight of the load before lifting by pushing the load along its resting surface.
3. If the load is too heavy or bulky, use lifting and carrying aids such as hand trucks, dollies, pallet jacks and carts, or get assistance from a co-worker.

4. If assistance is required to perform a lift, coordinate and communicate your movements with those of your co-worker.
5. Position your feet 6 to 12 inches apart with one foot slightly in front of the other.
6. Face the load.
7. Bend at the knees, not at the back.
8. Keep your back straight.
9. Get a firm grip on the object using your hands and fingers. Use handles when they are present.
10. Hold the object as close to your body as possible.
11. While keeping the weight of the load in your legs, stand to an erect position.
12. Perform lifting movements smoothly and gradually; do not jerk the load.
13. If you must change direction while lifting or carrying the load, pivot your feet and turn your entire body. Do not twist at the waist.
14. Set down objects in the same manner as you picked them up, except in reverse.
15. Do not lift an object from the floor to a level above your waist in one motion. Set the load down on a table or bench and then adjust your grip before lifting it higher.
16. Never lift anything if your hands are greasy or wet.
17. Wear protective gloves when lifting objects that have sharp corners or jagged edges.

Hazardous Materials

1. Follow the instructions on the label and in the corresponding Material Safety Data Sheet (SDS) for each chemical product you will be using in your workplace.
2. Use personal protective clothing or equipment such as goggles, face shield, neoprene gloves, rubber boots, shoe covers and rubber aprons, when using chemicals labeled "Flammable", "Corrosive", "Caustic" or "Poisonous".
3. Do not use protective clothing or equipment that has split seams, pin holes, cuts, tears, or other visible signs of damage.
4. Do not use chemicals from unlabeled containers or unmarked cylinders.
5. Do not perform "hot work", such as welding, metal grinding or other spark producing operations, within 50 feet of containers labeled "Flammable" or "Combustible".
6. Do not drag containers labeled "Flammable."
7. Do not store chemical containers labeled "Oxidizer" with containers labeled "Corrosive", "Caustic" or "Poison".

Ladders

1. Read and follow the manufacturer's instruction label affixed to the ladder.
2. Do not use ladders that have loose rungs, cracked or split side rails, missing rubber foot pads, or are otherwise visibly damaged.
3. Keep ladder rungs clean and free of grease. Remove buildup of material such as dirt or mud.
4. Do not place ladders in a passageway or doorway without posting warning signs or blocking off the area with cones or ropes so pedestrian traffic can be diverted away from the ladder. Lock the doorway that you are blocking with the ladder and post signs that will detour traffic away from your work.
5. Allow only one person on the ladder at a time.
6. Face the ladder when climbing up or down it.
7. Maintain a three-point contact by keeping both hands and one foot or both feet and one hand on the ladder at all times when climbing up or down the ladder.
8. When performing work from a ladder, face the ladder and do not lean backward or sideways from the ladder.

9. Do not stand on tables, chairs, boxes or other improvised climbing devices to reach high places. Use the ladder or step stool.
10. Do not stand on the top two rungs of any ladder.
11. Do not stand on a ladder that wobbles, or that leans to the left or right of center.
12. When using a straight or extension ladder, extend the top of the ladder at least 3 feet above the edge of the landing.
13. Secure the ladder in place by having another employee hold it if it cannot be tied to the structure.
14. Do not move a rolling ladder while someone is on it.
15. Do not place ladders on barrels, boxes, loose bricks, pails, concrete blocks or other unstable bases.
16. Do not carry items in your hands while climbing up or down a ladder.
17. Do not try to "walk" a ladder by rocking it. Climb down the ladder, and then move it.
18. Do not use a ladder as a horizontal platform.

Stairs

1. Stairs should have handrails if 4 or more steps exist.
2. Use the handrails when ascending or descending stairs or ramps.
3. Do not store or leave items on stairways.
4. Do not run on stairs or take more than one step at a time.

Electrical

1. Do not use frayed, cut or cracked electrical cords.
2. Do not plug multiple electrical cords into a single outlet.
3. Do not use extension or power cords that have the ground prong removed or broken off.
4. Use a cord cover or tape the cord down when running electrical cords across aisles, between work areas, across walkways or across entrances or exits.
5. Turn the power switch to "Off" and unplug machines before adjusting, lubricating or cleaning them.
6. Electrical control panels are clearly identified and secure.
7. Only certified electrical specialists have access to panels.
8. No exposed conductors at rear of switchboard.
9. Flexible extension cords should be properly repaired; especially splices.

Waste Disposal

1. Special containers are provided for different types of waste (oily rags, chemicals, scrap, garbage, etc.)
2. Food wastes are handled separately.
3. Where required, waste properly labeled.
4. Satisfactory external disposal arrangements.
5. Approved disposal arrangements for hazardous wastes.

Office Safety

General Rules

1. Do not stand on furniture to reach high places.
2. Use the ladder or step stool to retrieve or store items that are located above your head.
3. Do not jump from ladders or step stools.
4. Do not block your view by carrying large or bulky items; use the dolly or hand truck or get assistance from a fellow employee.

5. Do not throw matches, cigarettes or other smoking materials into trash baskets.
6. Do not tilt the chair you are sitting in. Keep all chair legs on the floor.
7. Do not kick objects out of your pathway; pick them up or push them out of the way.

Files

1. Open only one file cabinet drawer at a time. Close the filing cabinet drawer you are working in before opening another filing drawer in the same cabinet.
2. Put heavy files in the bottom drawers of file cabinets.
3. Use the handle when closing drawers and files.

Sharp Objects

1. Store sharp objects, such as pens, pencils, letter openers or scissors in drawers or with the tips pointing down in a container.
2. Carry pencils, scissors and other sharp objects with the tips pointing down.

Paper Cutter/Shredder

1. Position hands and fingers on the handle of the paper cutter before pressing down on the blade.
2. Keep the paper cutter handle in the closed or locked position when it is not being used.
3. Do not use paper cutting devices if the finger guard is missing.
4. Do not place your fingers in or near the feed of a paper shredder.

Staplers

1. Point the ejector slot away from yourself and bystanders when refilling staplers.
2. Keep fingers away from the ejector slot when loading or testing stapling devices.
3. Use a staple remover, not your fingers, for removing staples.

Shop Safety

General Shop Safety

1. Do not work alone.
2. Pick up hot vehicle parts using protective gloves, heat resistant pads or dry rags.
3. Place the hot vehicle parts in a metal container that is labeled "Hot Metal Parts Only."
4. Engage the parking brake and use the wheel blocks to chock the vehicle before starting the engine of the vehicle.
5. Wear a protective apron, gloves and safety goggles when charging a battery.
6. Do not point a compressed air hose at bystanders or use it to clean your clothing.

Personal Protective Equipment

1. Personal protective equipment has been properly selected for each job and should be worn at all times while performing that job. PPE will be provided by the employer; it is the responsibility of the employee to maintain and keep in a sanitary condition the item to ensure its longevity and suitability for use within the workplace.
2. Do not drill holes in or paint your hard hat.
3. Do not wear hard hats that are dented or cracked.
4. Wear your safety glasses, goggles or the face shield while operating chippers, grinders, lathes, sanders or other operations with the potential of flying particulates in the air, such as drilling, cutting, welding.
5. Wear the chemical goggles when using, applying or handling chemical liquids or

powders from containers labeled "Caustic" or "Corrosive".

6. Do not continue to work if your safety glasses become fogged. Stop work and clean the glasses until the lenses are clear and defogged.
7. Wear a welding helmet or welding goggles during welding operations.
8. Wear dielectric gloves when working on energized electric circuits.
9. Wear your ear plugs or ear muffs in areas posted "Hearing Protection Required".
10. Eye wash areas are readily available and accessible with proper signs and instructions.
11. Hearing protection should be worn in areas with extreme noise.

Respiratory Protection

G&W Equipment, Inc. has a voluntary respirator program for all shop areas with the exception of the paint booths in our Charlotte and Greenville facilities. For voluntary use, we recommend the use of a filtering face piece style respirator such as the N-95. Should you choose to use this style you should do the following:

a. Read and heed all instructions provided by the manufacturer on use, maintenance, cleaning and care, and warnings regarding the respirators limitations.
b. Choose respirators certified for use to protect against the containment of concern. NIOSH, the National Institute for Occupational Safety and Health of the U.S. Department of Health and Human Services, certifies respirators. A label of statement of certification should appear on the respirator or respirator packaging. It will tell you what the respirator is designed for and how much it will protect you.
c. Do not wear your respirator into atmospheres containing contaminants for which your respirator is not designed to protect against. For example, a respirator designed to filter dust particles will not protect you against gases, vapors or very small particles of fumes or smoke.
d. Keep track of your respirator so that you do not mistakenly use someone else's respirator.

Respiratory Protection continued

A separate respirator protection policy will be provided to those employees authorized to work in the paint booths in Charlotte and Greenville.

General Hand Tools

1. Do not continue to work if your safety glasses become fogged. Stop work and clean the glasses until the lenses are clear and defogged.
2. Carry all sharp tools in sheath or holsters.
3. Tag worn, damaged or defective tools "Out of Service" and do not use them.
4. Do not use a tool if the handle surface has splinters, burrs, cracks or splits.
5. Do not use impact tools such as hammers, chisels, punches or steel stakes that have mushroomed heads.
6. When handing a tool to another person, direct sharp points and cutting edges away from yourself and the other person.
7. Do not perform "make-shift" repairs to tools.
8. Do not throw tools from one location to another or from one employee to another.
9. Transport hand tools only in tool boxes or tool belts. Do not carry tools in your hand or clothing when climbing.

Files/Rasps

1. Do not use a file as a pry bar, hammer, screwdriver or chisel.
2. When using a file or a rasp, grasp the handle in one hand and the toe of the file in the other.
3. Do not hammer on a file.

Chisels

1. Use a chisel that has been sharpened; do not use a chisel that has a dull cutting edge.
2. Hold a chisel by using a tool holder if possible.
3. Clamp small work pieces in the vise and chip towards the stationary jaw when you are working with a chisel.

Hammers

1. Use a claw hammer for pulling nails and for driving nails.
2. Do not strike nails or other objects with the "cheek" of the hammer.
3. Do not strike one hammer against another hammer.
4. Do not use a hammer if your hands are oily, greasy or wet.

Saws

1. Keep control of saws by releasing downward pressure at the end of the stroke.
2. Do not use an adjustable blade saw, such as a hacksaw, if the blade is not taut.
3. Do not use a saw that has a dull blade.
4. Oil saw blades after each use of the saw.
5. Keep your hands and fingers away from the saw blade while you are using the saw.
6. Do not carry a saw by the blade.
7. When using the hand saw, hold the work piece firmly against the work table.

Screwdrivers

1. Always match the size and type of screwdriver blade to fit the head of the screw.
2. Do not hold the work piece against your body while using a screwdriver.
3. Do not put your fingers near the blade of the screwdriver when tightening a screw.
4. Use a drill, nail, or an awl to make a starting hole for screws.
5. Do not force a screwdriver by using a hammer or pliers on it.
6. Do not use a screwdriver as a punch, chisel, pry bar or nail puller.
7. Do not use a screwdriver to test the charge of a battery.
8. When using the spiral ratchet screwdriver, push down firmly and slowly.

Wrenches

1. Do not use wrenches that are bent, cracked or badly chipped or that have loose or broken handles.
2. Do not slip a pipe over a single head wrench handle for increased leverage.
3. Do not use a shim to make a wrench fit.
4. Use a split box wrench on flare nuts.
5. Do not use a wrench that has broken or battered points.
6. Discard any wrench that has spread, nicked or battered jaws or if the handle is bent.
7. Use box or socket wrenches on hexagon nuts and bolts as a first choice, and open end wrenches as a second choice.

Pliers

1. Do not use pliers as a wrench or a hammer.
2. Do not attempt to force pliers by using a hammer on them.
3. Do not slip a pipe over the handles of pliers to increase leverage.
4. Do not use pliers that are cracked, broken or sprung.
5. When using diagonal cutting pliers, shield the loose pieces of cut material from flying into the air by using a cloth or your gloved hand.

Vises

1. When clamping a long work piece in a vise, support the far end of the work piece by using an adjustable pipe stand, saw horse or box.
2. Position the work piece in the vise so that the entire face of the jaw supports the work piece.
3. Do not use a vise that has worn or broken jaw inserts, or has cracks or fractures in the body of the vise.
4. Do not slip a pipe over the handle of a vise to gain extra leverage.

Clamps

1. Do not use the C-clamp for hoisting materials.
2. Do not use the C-clamp as a permanent fastening device.

Snips

1. Wear your safety glasses or safety goggles when using snips to cut materials.
2. Wear your work gloves when cutting materials with snips.
3. Do not use straight cut snips to cut curves.
4. Keep the blade aligned by tightening the nut and bolt on the snips.
5. Do not use snips as a hammer, screwdriver or pry bar.
6. Use the locking clip on the snips after you have finished using them.

Knives and Sharp Instruments

1. When handling knife blades and other cutting tools, direct sharp points and edges away from you.
2. Cut in the direction away from your body when using knives.
3. Keep knives sharpened; do not use knives that have dull blades.
4. Use knives for the operations for which they are named.
5. Do not use knives that have broken or loose handles.
6. Do not use knives as screwdrivers or pry bars.
7. Do not pick up knives by their blades.
8. Carry knives with their tips pointed towards the floor.
9. Do not carry knives, scissors or other sharp tools in your pockets or an apron unless they are first placed in their sheath or holder.
10. When picking up any bags that have sharp objects protruding from them, grab the top of the bag above the tie-off, using both hands, and hold the bag away from your body.
11. When opening cartons, use safety box cutters.

Tool Boxes/Chests/Cabinets

1. Use the handle when opening and closing a drawer or door of a tool box, chest or cabinet.
2. Tape over or file off sharp edges on tool boxes, chests or cabinets.
3. Do not stand on tool boxes, chests or cabinets to gain extra height.

4. Lock the wheels on large tool boxes, chests or cabinets to prevent them from rolling.
5. Push large chests, cabinets and tool boxes; do not pull them.
6. Do not open more than one drawer of a tool box at a time.
7. Close and lock all drawers and doors before moving the tool chest to a new location.
8. Do not use a tool box or chest as a workbench.
9. Do not move a tool box, chest or cabinet if it has loose tools or parts on the top.

Electric Power Tools

1. Do not use power equipment or tools on which you have not been trained.
2. Keep power cords away from parts on the tools that are sharp, rotate or could pinch the cord.
3. Do not use cords that have splices, exposed wires, or cracked or frayed ends.
4. Do not carry plugged-in equipment or tools with your finger on the switch.
5. Do not carry equipment or tools by the cord.
6. Disconnect the tool from the outlet by pulling on the plug, not the cord.
7. Turn the tool off before plugging or unplugging it.
8. Do not leave tools that are "On" unattended.
9. Do not handle or operate electrical tools when your hands are wet or when you are standing on wet floors.
10. Do not operate spark inducing tools such as grinders, drills or saws near containers labeled "Flammable".
11. Turn off the electrical tool and unplug it from the outlet before attempting repairs or service work. Tag the tool "Out of Service".
12. Do not use extension cords or other three pronged power cords that have a missing ground prong.
13. Do not use an adapter such as a cheater plug that eliminates the ground.
14. Do not plug multiple electrical cords into a single outlet.
15. Do not run extension cords through doorways, through holes in ceilings, walls or floors.
16. Do not drive over, drag, step on or place objects on a cord.
17. Never operate electrical equipment barefooted. Wear rubber-soled or insulated work boots
18. Do not operate a power hand tool or portable appliance while holding a part of the metal casing or while holding the extension cord in your hand. Hold all portable power tools by the plastic hand grips or other nonconductive areas designed for gripping purposes.

Bench Grinders

1. Prior to installing a new grinding wheel, inspect the wheel for cracks or other visible damage; tap the wheel gently with a plastic screwdriver handle to detect cracks that are not visible. If the wheel has a dead sound rather than a ring sound, do not use the wheel.
2. Do not use grinding wheels that have chips, cracks or grooves.
3. Do not use the grinding wheel if it wobbles. Tag it "Out of Service".
4. Adjust the tongue guard so that it is no more than 1/4 inch from the grinding wheel.
5. Adjust the tool rest so that it is no more than l/8 inch from the grinding wheel.
6. Do not use a bench grinder if it is not firmly anchored to the work bench or other secure platform.
7. Do not install a grinding wheel whose labeled RPM speed is lower than the rated speed of the grinder.
8. Do not clamp a portable grinder in a vise to use it as a bench grinder.

9. Stand to one side of the plane of a rotating grinding wheel during the first few seconds of operation.
10. Grind on the side of the wheel only when it is made for side grinding.
11. Turn the grinding wheel "off" when you have finished working with it, and remain at the machine until it has completely stopped.

Drill Press

1. Replace the belt and pulley guards before starting the press and after making adjustments or repairs to the press.
2. Lock the press table into place and set the depth adjustment before turning on the power.
3. Remove the chuck key before turning on the power.
4. Clamp small pieces of stock to be drilled in the drill vise or to the work bench.
5. Do not wear rings, wristwatches, or gloves when working around the whirling auger bit.
6. Turn off the power and wait until the machine has come to a full stop before grabbing the piece of stock.
7. Keep the drill press and the area around the drill press clear of metal cuttings or lubricants.

Hydraulic/Pneumatic Tools

1. Do not point a charged compressed air hose at bystanders or use it to clean your clothing.
2. Lock and/or tag tools "Out of Service" to prevent usage of defective or damaged tool.
3. Do not use tools that have handles with burrs or cracks.
4. Do not use compressors if their belt guards are missing. Replace the belt guards before using the compressor.
5. Turn the power switch of the tool to "Off" and let it come to a complete stop before leaving it unattended.
6. Disconnect the tool from the air line before making any adjustments or repairs to the tool.

Vehicle Racks and Work Bays

1. When driving a vehicle in the work bay, use a spotter to make sure that the vehicle is positioned well on the rack.
2. Check to make sure that the rack is stable and capable of holding the vehicle load.
3. Slowly drive forward onto the rack. Do not make sudden starts or stops.
4. When positioned well onto the rack, place the vehicle transmission into park or first gear and set the parking brake.
5. When exiting a vehicle on the rack, do not jump from the driver's seat. Exit the vehicle, stand on the rack, face the vehicle, and side step until you are off of the rack.
6. When entering a vehicle on the rack, side step on the rack, facing the vehicle, to the door. Open the door and use the handles and arm rest to help you position yourself into the driver's seat.

Vehicle and Equipment Lifts

1. Remove all tools, cords, hoses, trash and any other debris from the lift area and wipe up all grease and oil spills before driving a vehicle into your service bay.
2. Position the lift arms, adapters and supports to the center of the lift out of the way of the vehicles tires before driving the vehicle into the service bay.

3. Do not stand in front of a vehicle being driven into the service bay.
4. Do not use any lift that has cracked contact pads, cracked lift arms or any other visible damage.
5. Do not use wood or concrete blocks as a substitute for an extender.
6. Use wheel blocks to chock the wheels of any vehicle on a runway lift while the vehicle is on the lift.
7. Do not leave the controls unattended while the lift is in motion.
8. Do not block or "tie open" the lift's control while the lift is in motion.
9. Do not use the engine or transmission supports or stands as a substitute for jack stands.
10. If the vehicle begins to slip off of the lift, run in the opposite direction of the fall, but not toward a wall or work bench that might trap you between the object and the vehicle.
11. Before you lower the vehicle, remove tool trays, jack, engine and transmission stands, and any other obstruction from under the vehicle.
12. Before removing the vehicle from your service bay, position the lift arms and supports to the center of the lift away from the wheels of the vehicles.
13. Do not "tie down" or override the air or control valves of the lift.
14. Do not raise a vehicle with anyone inside it.
15. When raising a vehicle, use the following procedure:
    a. Use the lift to raise the vehicle about one foot off the ground and moderately push the rear or front bumper of the vehicle to ensure that the vehicle frame is stably mounted on the support's contact pads of the lift.
    b. If the frame of the vehicle is not firmly touching a support contact pad or slipping, immediately lower the vehicle and start over.
    c. Once the vehicle is secure on the lift, lift the vehicle to the desired work height and visually check those contact points for misalignment before going under the vehicle.
    d. As you raise the vehicle, you will hear a "clicking" noise which indicates that the lift's locking device is engaging. If you do not hear the "clicking" noise, stop the lift, fully lower the vehicle and use another lift. Place an "Out of Service" tag on the control switch of the damaged lift and do not use it.
16. If you will be working under a lift that will be positioned at a point below where the lift's locking device engages, place four jack stands under the vehicle's frame or suspension for additional support before working under the vehicle.
17. Wear safety goggles when working underneath vehicles.

Parts Washer

1. Turn on local exhaust ventilation before starting any procedure.
2. Ensure the electrical cord has a ground and a grounded electrical outlet is used.
3. Use personal protective goggles or face shield when using chemicals labeled "FLAMMABLE", "CORROSIVE", "CAUSTIC", OR "POISONOUS".

Battery and Battery Chargers

1. Do not lay tools or metal parts on top of a battery.
2. Turn the fan motor selector switch to the "On" position before operating the battery charger. Turn the power switch of the battery charger to "Off" prior to connecting the cables to the battery posts.
3. Position the fork truck so that the battery is aligned with the rollers or the hoist used for moving it and engage the fork truck brake before removing the battery and placing it onto the charging rack.
4. Set the brakes on the lift truck prior to connecting the charging cables to the battery on

the lift truck.
5. Do not smoke in the battery charging areas.

Machine Guarding

1. Replace the guards, before starting machines, after making adjustments or repairs to the machine.
2. Do not remove, alter or bypass any safety guards or devices when operating any piece of equipment or machinery.
3. Read and obey safety warnings posted on or near any machinery.

Rigging Ropes, Cables and Chains

1. Visually inspect ropes for broken strands, cuts, worn spots or any other damage. Do not use damaged ropes.
2. Follow your employer's rigging inspection procedures.
3. Remove wire rope from service when any of the following conditions exist:
    a. Twelve (12) broken wires in one (1) lay of the hoist cable.
    b. Four (4) broken wires in a strand in one (1) lay of the hoist cable.
    c. Ten (10) broken wires in a strand in one (1) lay of a cable sling.
    d. When "bird caging" or kinking is present.
    e. When excess corrosion is present on the cable.
4. Wear leather work gloves when handling wire ropes or cables.
5. Keep your hands away from the cable that is "feeding" through a drum, pulley or sheave.

Cranes and Hoists

1. Do not use load hooks that are cracked, bent or broken.
2. Passengers are not permitted to ride inside the operator's cab of a truck crane.
3. Keep crane windows clean. Do not use a crane if its windows are broken.
4. Do not exceed the rated load capacity of the crane as specified by the manufacturer.
5. Use cribbing mats when operating the crane on "soft" ground.
6. Fully extend the outriggers of the crane before attempting a lift.
7. Stay outside the barricades of the posted swing radius of the crane.
8. Do not leave a hoisted load suspended in the air.
9. Do not hoist loads over people.
10. Do not drive the crane on the road shoulders.
11. When operating a crane maintain a full and unrestricted view and follow only the signals of the person designated to give you signals.
12. Replace the belt, gear or rotating shaft guards after servicing a crane; do not use the crane if guards are missing from these areas.
13. Ensure limit stops work effectively.
14. Test the operation of hand and foot controls before attempting a lift.
15. Only operators that are properly trained should be using this equipment.

Welding Safety

Compressed Gas Cylinders - Storage and Handling

1. Do not handle oxygen cylinders if your gloves are greasy or oily.
2. Store all compressed gas cylinders in the upright position and secure them from falling over.
3. Keep all cylinders not in use capped.
4. Keep cylinders away from elevated temperatures or sources of heat or flames.

5. Store flammable gases (acetylene, propylene, propane) separate from oxidizers (oxygen) by at least 20 feet or a solid concrete/HCB wall.
6. Do not lift compressed gas cylinders by the valve protection cap.
7. Do not store compressed gas cylinders in areas where they can come in contact with chemicals labeled "Corrosive".
8. Place cylinders on the cradle, sling board, pallet or compressed gas cylinder basket to hoist them.
9. Do not place compressed gas cylinders against electrical panels or live electrical cords where the cylinder can become part of the circuit.
10. Do not hoist or transport cylinders by means of magnets or choker slings.
11. Do not store oxygen cylinders near fuel gas cylinders such as propane or acetylene, or near combustible material such as oil or grease.

Use of Compressed Gas Cylinders

1. Do not use dented, cracked or other visibly damaged cylinders including deep rusting or leaking.
2. Use only an open ended or adjustable wrench when connecting or disconnecting regulators and fittings.
3. Close the cylinder valve when work is finished, when the cylinder is empty or at any time the cylinder is moved.
4. Stand to the side of the regulator when opening the valve.
5. If a cylinder is leaking around a valve or a fuse plug, move it to an outside area away from where work is performed, and tag it to indicate the defect.
6. Do not use compressed gas to clean yourself, equipment or your work area.
7. Do not remove the valve wrench from acetylene cylinders while the cylinder is being used.
8. Open cylinder valves slowly. Open the valves fully when the compressed gas cylinder is being used, in order to eliminate possible leakage around the cylinder valve stem.

Oxy-acetylene Welding

1. Do not use oxygen cylinders in areas where oils or any combustible liquids such as diesel fuel or motor fuel are present.
2. Turn the valve on the torch clockwise to turn off the gas before putting down the welding or cutting torch.
3. Never allow pressure to remain in the hoses overnight:
    a. Turn the valve knobs located at the base of the torch handle, clockwise, to close the valves.
    b. Turn the valve knobs on the oxygen and acetylene cylinders, clockwise, to close the valves on these cylinders.
    c. Reduce the pressure on the regulator diaphragms by pulling back on the T-handles, out from the regulator, until the T-handles turn easily; do not completely back the T-handles out from the regulator.
    d. Turn the valve knobs at the base of the torch, counterclockwise, to open the valves; leave the valves open for only two seconds, then turn the valve knobs clockwise to close the valves again. If you do not observe a drop in pressure on the regulator gages, repeat steps a.-b.
4. If the cylinder has been transported in a horizontal position, do not use it until it has been stored upright for two hours.
5. Use the red hose for gas fuel and the green hose for oxygen.

6. Do not use worn or cracked hoses.
7. Do not use oil, grease, or other lubricants on the regulator.
8. "Blow Out" hoses before attaching the torch.
9. "Blow Out" the cylinder valve before attaching or reattaching a hose to the cylinder.
10. Do not use a cigarette lighter to ignite torches; use friction lighters only.
11. Do not change electrodes using your bare hands; use the dry rubber gloves.
12. "Bleed" oxygen and fuel lines at the end of the work shift.
13. Use the welding cart that has a safety chain or cable when transporting cylinders used for welding.
14. Adequate ventilation is required in area where welding is performed.
15. Proper gloves, gloves, apron, leathers, face shield or goggles with proper tinted lens are required for all operators when welding, cutting or brazing.

Welding Equipment

1. Welding gloves, gloves, apron, leathers, helmet with proper tinted lens are required for all welders when using welding equipment.
2. Do not perform welding tasks while wearing wet cotton gloves or wet leather gloves.
3. Do not use the welding apparatus if the power cord is cut, frayed, split or otherwise visibly damaged or modified.
4. When replacing power plugs and cords of the welding apparatus, always check to ensure that the ground wire is connected.
5. Fire extinguisher available.
6. Adequate ventilation is required in area where welding is performed.

Spray Painting Safety

1. Store rags that have oil or paint on them in closed metal containers labeled "oily rags".
2. Press the pressure relief valve on painting canisters and painting guns prior to disconnecting them.
3. Do not eat, drink, smoke or apply cosmetics where spray painting is being performed.
4. Do not operate spark inducing tools such as grinders, drills or saws near containers labeled "Flammable" or in an explosive atmosphere such as paint spray booths or rooms.
5. Perform all spray painting operations in the spray booth or room.
6. Return containers of thinners, mineral spirits and other liquids labeled "Flammable" to the storage cabinet labeled "Flammable Storage" when painting is finished.
7. Do not point the spray gun toward any part of your body or at anyone else.
8. Turn the control switch to the "on" position to operate the mechanical ventilation system before and during all spraying operations.
9. Mechanical ventilation arranged so that it will not circulate the contaminated air.
10. Spray area free of hot surfaces and at least 20 feet from flames, sparks, operating electrical motors and other ignition sources.
11. Approved respiratory equipment used during spraying operations and sanding.
12. Solvents used for cleaning have a flash point of 100°F or more.
13. Fire control sprinkler heads are kept clean.
14. "NO SMOKING" signs are posted in spray areas, paint rooms, and paint storage areas.
15. Appropriate disposable suit and positive pressure ventilation system worn when spraying toxic paints.

Storerooms, Stockrooms, and Warehouses

Receiving/Shipping

1. Ensure trailer wheels are chocked before entering the trailer.
2. Remove or bend nails and staples from crates before unpacking the crates.
3. When cutting shrink wrap with a blade, always cut away from you and your co-workers.
4. Use long handled snips when cutting strapping bands away from a shipping container.
5. Wear your safety glasses when cutting strapping bands, uncrating materials and driving nails.
6. Stand to the side of the strapping band when cutting it. Use extreme care when removing bands from pipe on round stock loads. Chock or block loads before removing band to prevent a load shift.
7. Do not use pallets or skids that are cracked or split or have other visible damage.
8. Do not jump from elevated places such as truck beds, platforms or ladders.

Stocking Shelves/Picking Parts

1. When stocking shelves by hand, position the materials to be shelved slightly in front of you, so you do not have to twist when lifting and stacking materials.
2. Do not let items overhang from shelves into walkways.
3. Remove one object at a time from shelves.
4. Place items on shelves so that they lie flat and do not wobble.
5. Stack heavy or bulky storage containers on middle and lower shelves of the storage rack.
6. Do not run on stairs or take more than one step of a staircase at a time.
7. Do not lift slippery or wet objects; use a hand truck.
8. Do not try to kick objects out of pathways. Push or carry them out of the way.
9. Move slowly when approaching blind corners.
10. Visually inspect for sharp objects or other hazards before reaching into containers such as garbage cans, boxes, bags or sinks.
11. Follow the safe handling instructions listed on the label of the container or listed on the corresponding Material Safety Data Sheet when handling each chemical stored in the stockroom.
12. Do not handle or load any containers of chemicals if their containers are cracked or leaking.

Carts

1. Do not exceed the rated load capacity noted on the manufacturer's label on the cart.
2. Ask a spotter to help guide carts around corners and through narrow aisles.
3. Do not stand on a cart or float or use it as a work platform.

Hand Trucks

1. When loading hand trucks, keep your feet clear of the wheels.
2. Do not exceed the manufacturer's load rated capacity. Read the capacity plate on the hand truck if you are unsure.
3. Place the load so that it will not slip, shift or fall. Use the straps, if they are provided, to secure the load.
4. For extremely bulky or pressurized items such as gas cylinders, strap or chain the items to the hand truck.

5. Tip the load slightly forward so that the tongue of the hand truck goes under the load.
6. Push the tongue of the hand truck all the way under the load that is to be moved.
7. Keep the center of gravity of the load as low as possible by placing heavier objects below the lighter objects.
8. Push the load so that the weight will be carried by the axle and not the handles.
9. If your view is obstructed, ask a spotter to assist in guiding the load.
10. Do not walk backward with the hand truck, unless going up stairs or ramps.
11. When going down an incline, keep the hand truck in front of you so that it can be controlled at all times.
12. Move hand trucks at a walking pace.
13. Store hand trucks with the tongue under a pallet, shelf, or table.

Vehicle/Driving Safety

When transporting equipment or employees the Company complies with all Federal Motor Carrier Safety Regulations administered by the U.S. Department of Transportation (DOT), as well as all state and local laws required for commercial motor vehicles.

Vehicles must comply with all regulations according to laws regarding Gross Vehicle Weight Rating or Gross Combination Weight Rating, and laws required for transporting hazardous materials.

Company Drivers

1. Only employer authorized personnel may operate any company vehicle.
2. Do not operate a vehicle if you are ill or fatigued.
3. Do not operate a vehicle if you are taking medication whose container label indicates that the medication may cause drowsiness or other side effects.
4. Shut all doors and fasten seat belt before moving the vehicle.
5. Obey all traffic patterns and signs at all times.
6. Do not drive on the road shoulder.
7. Use side and rearview mirrors before making lane changes, turns and sudden stops.
8. Turn the vehicle off before fueling.
9. Do not smoke while fueling a vehicle.
10. Wash hands with soap and water if you spill fuel on your hands.

CDL Drivers must meet the following requirements:

1. Must have a valid commercial driver's license.
2. Be able to drive the vehicle safely.
3. Be able to determine if the vehicle is safely loaded.
4. Know how to block, brace, and tie down cargo.
5. Pass a controlled substance test, subject to random testing.

The following offenses are subject to suspension or firing:

1. Driving while under the influence of alcohol.
2. Driving while illegally using drugs.
3. Driving while illegally possessing or transporting drugs.
4. Leaving the scene of an accident.

5. Using a company vehicle while committing a felony.

Vehicles

1. Drivers must be sure their vehicle is safe and properly operating before each trip.
2. All vehicles must be on a regular maintenance schedule.
3. Each vehicle should be equipped with a first aid kit and a fire extinguisher.
4. All tools in transport vehicles are to be placed in closed boxes which are secured in place.
5. Employees are prohibited from riding on top of any load which can shift or become unstable.
6. Requirements for coupling devices and towing methods must be met.

POWERED INDUSTRIAL TRUCK PROGRAM

G & W Equipment, Inc. has created this program in the interests of safeguarding our employees as they professionally and competently operate these machines.

PURPOSE

The purpose of this Powered Industrial Truck Program is to protect the health and safety of all employees assigned to operate powered industrial trucks and to comply with the requirements of 29 CFR 1910.178 (Powered Industrial Trucks). The following employees are required to be certified in properly operating all those types of forklifts that are part of the normal performance of their work-related duties: warehouse employees, forklift delivery drivers, field service techs, Branch Managers, Service Supervisors and Technical Trainers.

AUTHORITY & REFERENCE

Occupational Safety and Health Administration (OSHA) 29 CFR 1910.178 (Powered Industrial Trucks)

I. RESPONSIBILITY FOR COMPLIANCE

A. The Safety Committee will be responsible for the following:

1. Developing specific policies and procedures pertaining to the operation and maintenance of powered industrial trucks.
2. Implementing a training program based on the general principles of safe truck operation, the type of vehicle(s) being used in the workplace, the hazards of the workplace created by the use of the vehicle(s)
3. Coordinating the training and performance testing of Powered industrial truck operators.
4. Maintaining the training certification records and performance tests of employees included in the training sessions.
5. Periodically reviewing the effectiveness of the program.

B. Branch Managers and supervisors are responsible for:

1. Ensuring that employees who operate powered industrial trucks in their departments have received appropriate training.
2. Providing observations and feedback to operators to ensure safe equipment operation.
3. Ensuring that the vehicles under their responsibility are properly inspected and maintained in a safe operating condition.

C. Powered Industrial Truck operators are responsible for:

1. Operating powered industrial trucks in a safe manner.

2. Inspecting powered industrial trucks at the beginning of each work shift and completing the appropriate inspection forms if requested
3. Reporting equipment defects and/or maintenance needs to their supervisors immediately.

The following is a list of safety rules pertaining to the operation of a powered industrial truck.

A. Truck Operations:

1. A safe distance will be maintained from the edge of ramps or platforms while on any elevated dock, platform or freight car.
2. When leaving the truck unattended, the forks will be fully lowered the controls placed in neutral, the power shut off, the brakes set to and the key or connector plug removed. The wheels will be blocked if the truck is parked on an incline. **Note:** A powered industrial truck is considered unattended when the operator is 25 feet or more away from the vehicle which remains in his/her view or whenever the operator leaves the vehicle and the truck is not in view.
3. When the operator of an industrial truck is dismounted and within 25 ft. of the truck still in his view, the load engaging means shall be fully lowered, controls neutralized, and the brakes set to prevent movement.
4. Trucks will not be used to open or close freight doors.
5. The brakes of trucks, trailers and railroad cars will be set and wheel chocks or stops will be in place to prevent movement during loading or unloading operations. Fixed jacks may be necessary to support a semi-trailer during loading or unloading when the trailer is not coupled to a tractor. The flooring of trucks, trailers and railroad cars will be checked by the operator for breaks and weakness before driving these vehicles into these surfaces.
6. An overhead guard will be used as protection against falling objects. **Note:** The overhead guard is intended to offer protection from the impact of small packages, boxes or bagged materials only.
7. A load backrest extension will be used whenever necessary to minimize the possibility of the load or part of the load from falling rearward.
8. Fire doors, access to stairways, fire extinguishers and emergency exits will always be kept clear; drivers are not to park in front of these areas.
9. Only approved/pre-inspected industrial trucks will be used in hazardous conditions.
10. Powered industrial trucks will not be driven up to anyone standing in front of a bench or other fixed object.
11. No person will be allowed to stand or pass under the elevated portion of any truck, whether loaded or empty. The hydraulics may fail which would result in injury to that person.
12. Passengers are not permitted to ride on powered industrial trucks unless authorized and the truck is equipped with a safe place for the passenger to ride.
13. The operator will never place his/her arms or legs between the uprights of the mast or outside the running lines of the truck.
14. The operator will never push one load with another load.
15. Spinner knobs must not be attached to the steering hand-wheels of trucks not originally equipped with such knobs.
16. Never lift people on the forks of a powered industrial truck unless the truck has a properly designed safety platform securely attached to the lifting carriage and/or forks. If the truck is equipped with vertical controls only, or vertical and horizontal

controls elevatable with the lifting carriage or forks, means will be provided whereby personnel on the platform can shut off power to the truck. Protection from falling objects as indicated necessary by the operating conditions will also be provided.

17. Approved safety platforms, firmly secured to the lifting carriage and/or forks, shall be used.

B. Traveling:

1. Traffic regulations will be observed, including observing all STOP SIGNS and authorized plant speed limits.
2. A safe distance of approximately three truck lengths from the truck ahead will be maintained whenever possible.
3. The “Right of Way” will be yielded to ambulances or other vehicles in emergency situations.
4. The operator will slow down and sound the horn at blind intersections and other locations where vision is obstructed.
5. If the load being carried obstructs forward view, the operator will travel in reverse with the load trailing.
6. Railroad tracks will be crossed diagonally whenever possible. Parking closer than 8 feet from the center of railroad tracks is prohibited.
7. Grades will be ascended or descended slowly. When ascending or descending grades in excess of 10 %, loaded trucks will be driven with the load upgrade. Unloaded trucks will be operated on all grades with the load engaging means downgrade. On all grades, the load and load engaging means will be tilted back and raised only as far as necessary to clear the road surface.
8. The operator will slow down for wet and slippery floors.
9. Dockboards or bridgeplates will be properly secured before they are driven over and their rated capacity will never be exceeded. Dockboards or bridgeplates will always be driven over carefully and slowly.
10. Elevators will be approached slowly and then entered squarely after the elevator car is properly leveled. Once on the elevator, the transmission will be in neutral, the engine shut off and the brakes set to prevent movement.
11. Motorized hand trucks must always enter elevators with the load end forward.
12. When making turns, the operator will reduce the truck’s speed to a safe level by means of turning the hand steering wheel in a smooth, sweeping motion. Except when maneuvering at a very low speed, the hand steering wheel shall be turned at a moderate, even rate.
13. Other trucks traveling in the same direction or at intersections, blind spots or other dangerous locations will not be passed.
14. Horseplay and stunt driving, including spinning of the tires, is not permitted.
15. Running over loose objects in aisle ways will be avoided.
16. Under all travel conditions, the truck will be operated at a speed that will permit the truck to be brought to a stop in a safe manner.
17. The operator will always look in the direction of travel and keep a clear view of the path of travel.
18. Railroad tracks will be crossed diagonally whenever possible.

C. Loading/Stacking:

1. Only stable and safely arranged loads will be handled. Use extreme caution when handling off-centered loads that cannot be centered on the forks.
2. Only loads within the rated handling capacity of the truck will be lifted.
3. The forks will be placed under the load as far as possible and the mast carefully titled backward to stabilize the load.
4. Extreme care will be used when tilting the load forward or backward especially when high tiering. Tilting forward with load engaging means elevated shall be prohibited except to pick up a load. An elevated load will not be tilted forward except when the load is in a deposit position over a rack or stack of material.
5. When stacking or tiering loads, the operator will tilt the load backward only enough to stabilize the load.
6. The operator will remove unsafe containers and pallets from service.
7. Trucks equipped with attachments will be operated as a partially loaded truck when not handling a load.
8. The operator will adjust long and high loads, including multiple-tiered loads that may affect the capacity of the truck.
9. The operator will insure there is always a safe distance between the mast and overhead lights, pipes and sprinkler systems.

D. Maintenance of the Truck:

1. Powered industrial trucks will be inspected before being placed in service. This inspection will be made at least daily. Trucks used on a round-the-clock basis will be inspected after each shift.
2. If at any time during the driver's shift a truck is found to be in unsafe, the operator will immediately notify his/her supervisor and remove the truck from service until it has been restored to safe operating condition.
3. Fuel tanks shall not be filled while the engine is running. Spillage shall be avoided.
4. Spillage of excess oil or fuel will be carefully cleaned up and disposed of in accordance with state and federal regulations. Appropriate authorities will be notified if required by law. Fuel cap must be replaced before restarting the engine.
5. The operator will always wear the proper personal protective equipment when fueling the truck or performing any other maintenance on the truck.
6. No truck will be operated with a leak in the fuel system until the leak has been corrected.
7. Open flames will not be used to check the electrolyte level in batteries or the gasoline level in the fuel tank.
8. Smoking is not allowed while changing LPG tanks, refueling gas powered trucks or changing or charging batteries for electric powered vehicles.

VI. EQUIPMENT INSPECTION AND MAINTENANCE

A. The operator will conduct an examination of the truck before the vehicle is placed into service. This inspection must be made at least daily. When trucks are used on a round-the-clock basis, each truck will be inspected after each shift. The results of these inspections will be documented on a Promatch Machine Inspection form. (a copy of this follows this section in the manual.)

B. The operator will immediately notify his/her supervisor if the truck is found to be in need of repair and/or unsafe.

C. If repairs are needed on a powered industrial truck that prevent its safe operation, the truck will be taken out of service until the repairs have been made.

D. Repairs must be made by authorized personnel only.

E. When the temperature of any part of any truck is found to be in excess its normal operating temperature, the vehicle must be removed from service and not returned to service until the cause for the overheating has been eliminated.

F. Any vehicle that emits hazardous sparks, flames or smoke from the exhaust system will be removed from service and not returned from service until the cause for the hazardous emissions has been corrected.

G. Powered industrial trucks are to be kept in a clean condition and free of excess lint, oil, and grease. Only noncombustible agents should be used for cleaning trucks. Cleaning trucks with low flash point solvents (below 100 degrees Fahrenheit) are not permitted.

H. Precautions regarding toxicity, ventilation, personal protective equipment and fire hazards are to be followed as stated on the warning label and/or the Safety Data Sheet (SDS) for that particular cleaning agent.

I. Parts used in any industrial truck requiring replacement will be replaced only with parts equal in safety to those parts originally provided by the manufacturer.

VII. OPERATOR TRAINING

A. Only employees who have successfully completed training in accordance with 1910.178(l) will be permitted to operate a powered industrial truck

B. Training will consist of a combination of formal instruction (lecture, discussion videotape program written material) practical training (demonstrations performed by the trainer and practical exercises performed by the trainee, and evaluation of the operator's performance in the workplace.

C. Operator training and evaluation will be conducted by persons who have the knowledge, training, and experience to train powered industrial truck operators and evaluate their competence.

D. The formal (classroom) training will include a review/discussion of the following topics:

1. The factors of weight distribution and center of gravity that affect the stability of the truck.
2. The safe operation of powered industrial trucks.
3. Truck controls and instrumentation; where they are located, what they do and how they work.
4. The similarities and differences between powered industrial trucks and automobiles.
5. Steering and Maneuvering in a safe manner, within restricted areas.
6. The proper techniques of battery charging and refueling.

7. The inspection of powered industrial trucks.
8. Vehicle lifting capacity.
9. Load manipulation, stacking and unstacking.
10. Pedestrian traffic in areas where the vehicle will be operated.
11. Narrow aisles and other restricted places where the vehicle will be operated.
12. Other unique and potentially hazardous environmental conditions in the workplace that could affect the safe operation of the vehicle.

E. Refresher training in relevant topics will be provided to the operator when:
1. The operator has been observed to operate the vehicle in an unsafe manner.
2. The operator has been involved in an accident or near-miss incident.
3. The operator has received an evaluation that reveals that the operator is not operating the truck safely.
4. The operator is assigned to drive a different type of truck.
5. A condition in the workplace changes in a manner that could affect safe operation of the truck.

F. An evaluation of each PIT operator's performance will be conducted at least once every three years.

G. If an operator has previously received training in a topic specified in paragraph 29 CFR 1910.178, and the training is appropriate to the truck and working conditions encountered, additional training in that topic is not required if the operator has been evaluated and found competent to operate the truck safely.

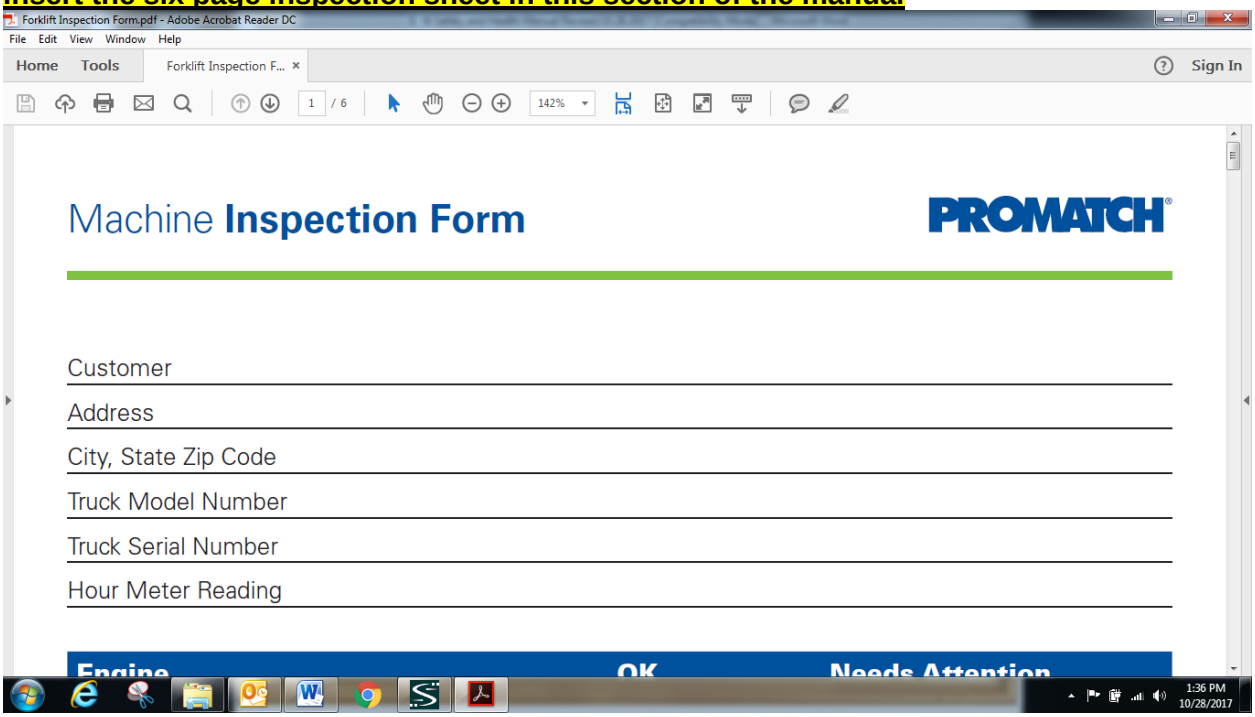
H. Training will be documented in the Employee's Personnel folder. The certification will contain each employee's name, the date of training and the name of the instructor.

IX. PROGRAM REVIEW

A. Each Branch Manager, in coordination, with the Safety Committee, will review and evaluate the effectiveness of this program when any of the following occurs:

1. On an annual basis using the Promatch Machine Inspection form.
2. When changes occur to the OSHA Powered Industrial Truck Standard that require a revision to this program.
3. When changes occur to related procedures that require a revision.
4. When facility operational changes occur that requires a revision.
5. When there is an accident or near miss that relates to this area of safety.

Insert the six page inspection sheet in this section of the manual



Control of Hazardous Energy (Lock-Out/Tag-Out) Policy

PURPOSE:

This procedure covers the minimum requirements for lockout and/or tagout of energy isolating devices to protect employees from hazardous energy including electrical, mechanical hydraulic, pneumatic, or other energy. It will be used as a facility wide general procedure for isolating all potentially hazardous energy (lockout/tagout) before employees perform any servicing and maintenance activities where unexpected energizations, start up or release of stored energy could cause injury. This procedure, when used in conjunction with the specific information recorded on the attached audit form of this procedure, provides the necessary information for lockout/tagout.

PROCEDURE:

1. Only trained, authorized employees can lockout/tagout.
2. All affected and other employees working in or entering work areas where lockout/tagout is performed must be trained.
3. Determine all energy isolating devices requiring lockout/tagout to ensure effective control of hazardous energy.
4. Determine the type and magnitude of the energy and required controls.
5. Notify all affected employees of the plans to lockout/tagout.
6. Shutdown the equipment/process by normal procedures.
7. Locate the necessary energy isolating device(s) to equipment/process and operate them to isolate energy sources and affix lockout/tagout devices.
8. Relieve all stored or residual energy and take appropriate measures to ensure it does not re-accumulate. Affix lockout/tagout device as necessary.
   The machine will be cleared of tools and materials, and all employees will be removed from the area where the isolation of stored energy will take place.
9. Verify energy isolation and relief of stored energy after ensuring employees are not exposed and before beginning work. After start buttons are activated, press the stop button.
10. Perform the servicing and maintenance.
11. To safely restore machines, equipment or process to normal production operations, replace all guards and safety devices, remove all personnel, and remove all tools and equipment.
12. Notify affected employees that lock-out/tag-out devices have been removed.
13. Remove lockout/tagout devices (by authorized employee installing lockout/tagout devices).

LOCKOUT/TAGOUT DEVICE REMOVAL BY EMPLOYER:

When it becomes necessary to remove the lockout/tagout devices of an employee who is unavailable at the facility, it can be done only by the employer and then under a special, approved procedure, as follows:

a. Every attempt will be made to contact the employee who originally applied the lock. If they are not available, the Branch Manager will remove the lock indicating that the machine or device that had been locked out can now be used for its intended purpose.

Group Lock-Out/Tag-Out will not be used in the facility, limiting the control of energy isolating devices to one machine or equipment piece at a time. This is intended to **limit the** amount of exposure from hazards associated with unexpected start-up of any machine or equipment being serviced at the time.

Training:

Those employees deemed to be “authorized” will receive the appropriate training in isolating stored energy and put into effect the prescribed procedures to ensure that the energy isolating device has, in effect, addressed this concern.

Those employees deemed to be “affected” will receive the proper awareness training of when to recognize lock-out/tag-out devices, e.g. locks or tags, and are made aware of not to remove these unless an authorized employee or the Branch Manager has been consulted first.

Outside Contractors:

Whenever outside contractors put into effect energy isolating procedures, including the application of locks or tags, they will communicate this with the Branch Manager. This individual will then communicate these procedures to those affected employees working within the proximity of the equipment that had been tagged and/or isolated. It is understood that they will comply with the restrictions and prohibitions established by the outside contractor’s energy control program.

Annual Review of Program:

The Branch Manager will coordinate an annual review and audit of procedures associated with the control of hazardous energy release. The purpose of this review will be to ensure that the correct procedures are being followed and are understood by all participants directly and indirectly affected. This review will be documented on an audit form (see below).

LOCKOUT/TAGOUT AUDIT

DATE:	DEPT:	MACHINE/EQUIPMENT:
Name of employee(s) using lockout/tagout		Serial number of lock(s) being used on lockout

Message on tag used with lock

_____

_____

_____

Were there more than one employee working on the equipment which was locked? Explain

_____

_____

Were there locks being used for each employee? Explain

_____

_____

_____

Reason for using lockout/tagout procedure:

_____

_____

Has proper procedures been used in lockout/tagout shutdown? Yes __ No __
Explain _____

Interview with employees next to operation being locked or tagged out? Comments:

_____

_____

Has proper procedure been used in lockout/tagout startup? Yes ___ No ___
Explain _____

_____

_____

When was the last time the employee was trained on lockout/tagout procedures?

_____

_____

Signature _____
(Inspector)

Electrical Safety

In accordance with requirements laid down in OSHA regulations 1910.331 thru 1910.335, all employees will adhere to safety-related work practices. These shall be employed to prevent electric shock or electrical contacts, when work is performed near or on equipment or circuits which are or may be energized. Live parts shall be de-energized before the employee works on them unless it can be established that de-energizing introduces additional or increased hazards or is not feasible due to design of equipment or operational limitations. If exposed live parts are not de-energized for the above reasons, other safety practices shall be used to protect employees. Only qualified persons may work on energized circuits or equipment. They shall be capable of working safely on energized circuits and be familiar with the proper use of special precautions, personal protective equipment, insulating and shielding materials, and insulated tools.

Safety-related work practices shall be used 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. The specific safety-related work practices shall be consistent with the nature and extent of the associated electrical hazards.

1. De-energized parts - Live parts to which an employee may be exposed shall be de-energized before the employee works on or near them, unless the employer can demonstrate that de-energizing introduces additional or increased hazards or is infeasible due to equipment design or operational limitations. Live parts that operate at less than 50 volt to ground need not be de-energized if there will not be increased exposure to electrical burns or to explosion due to electric arcs.

2. Energized Parts - If the exposed live parts are not de-energized, (i.e., for reasons of increased or additional hazards or infeasibility), other safety-related work practices shall be used to protect employees who may be exposed to the electrical hazards involved. Such work practices shall protect employees against contact with energized circuit parts directly with any part of their body or indirectly through some other conductive object. When working on energized parts, the appropriate PPE shall be used.

3. Only qualified persons may work on electric circuit parts or equipment that has not been de-energized under the procedures of these standards. Such persons shall be capable of working safely on energized circuits and shall be familiar with the proper use of special precautionary techniques, personal protective equipment, insulating and shielding materials, and insulated tools.

    a. Conductive Materials and Equipment - Conductive materials and equipment that are in contact with any part of an employee's body shall be handled in a manner that will prevent them from contacting exposed energized conductors or circuit parts. If an employee must handle long dimensional conductive objects (such as hand tools or truck parts) in areas with live parts, the hazard must be minimized by the use of insulation, guarding, or material handling techniques.
    b. Housekeeping Duties - Where live parts present an electrical contact hazard, employees may not perform housekeeping duties at such close distances to the parts that there is a possibility of contact, unless adequate safeguards (such as insulating equipment or barriers) are provided.

c. Extension Cord Use:
    i. Employees using extension cords (drop cords) to power tools and/or equipment for the performance of maintenance or repair of trucks shall use GFCI protection.
    ii. All extension cords must be grounding type, made with UL listed parts, and be in good physical condition.
    iii. The use of an extension cord must not create a trip hazard.
    iv. Portable cord-and-plug connected equipment and flexible cord sets (extension cords) shall be visually inspected before use on any shift for external defects and for evidence of possible internal damage.
    v. Cord and plug-connected equipment and extension cords which remain connected once they are put in place and are not exposed to damage need not be visually inspected until they are relocated.
    vi. Energized plug and receptacle connections may be handled only with insulating protective equipment if the condition of the connection could provide a conducting path to the employee's hand.
    vii. Employees shall wear protective equipment for the eyes or face wherever there is danger of injury to the eyes or face from electric arcs or flashes or from flying objects resulting from electrical explosion.

Electrical Safety-Related Work Practices (1910.331-335)
Self-Audit Checklist

Client: _____ Location: _____ Date _____

Audit Performed by _____

	Y	N	NA	COMMENTS
A. Electrical Safety-Related Work Practices Program				
1. Model written program available				
2. Training complete and documented				
3. Lockout/Tagout program includes electrical safety-related work practices				
B. Selection and Use of Work Practices				
1. Minimum safe work distances established when work involves energized parts				
2. Illumination provided in all spaces containing exposed electrical conductors				
3. Measures taken to avoid inadvertent contact with energized parts in enclosed or confined spaces				
4. Measures taken to avoid inadvertent contact of conductive materials or equipment with energized parts during handling				
5. Conductive apparel not worn unless rendered nonconductive				
6. Measures taken to avoid inadvertent contact with energized parts during housekeeping duties				
7. Electrical safety interlocks defeated only by a qualified person following specific procedures				
C. Use of Equipment				
1. Procedures for handling portable equipment implemented				
2. Procedures for working with extension cords implemented				
3. Only qualified persons allowed to perform test work				
4. Measures taken to prevent hazards from the occasional use of flammable materials near electrical equipment				
D. Safeguards for Personnel Protection				
1. Personal Protective Equipment appropriate for the electrical hazard provided and used				
2. Insulated tools and handling equipment used for work performed near exposed energized circuits				
3. Appropriate alerting techniques used to warn and protect workers				

HEAT ILLNESS PREVENTION

The purpose of this program is to ensure that all G & W Equipment employees, working in outdoor places of employment or in other areas when environmental risk factors for heat illness are present, are protected from heat illness and are knowledgeable of heat illness symptoms, methods to prevent illness, and procedures to follow if symptoms occur.

RESPONSIBILITIES:

a. Employees

i. Awareness and compliance with all appropriate heat illness prevention procedures while performing assigned duties
ii. Employees are ultimately responsible for drinking adequate amounts of hydrating fluids when the environmental risk factors for heat illness are present
iii. Ensure access to a shaded area is available to recover from heat related symptoms
iv. Inform their supervisor if shade and/or water is inadequate
v. Report symptoms of heat related illness promptly to their supervisor
vi. Call 911 to request emergency medical services in the event medical assistance is required

b. Supervisors

i. Identify and maintain records of all tasks/employees that are required to work outdoors where potential heat illness could occur
ii. Require all affected employees receive proper training on heat illness prevention and comply with all appropriate procedures
iii. Ensure that adequate water and shade are available at the job site when the environmental risk factors for heat illness are present
iv. Encourage employees to drink water frequently
v. Call 911 to request emergency medical services in the event medical assistance is required

c. Safety Committee

i. Establish and update the written Heat Illness Prevention Program
ii. Provide consultation/training to departments who fall within the scope of the program
iii. Assist departments in determining when, where, and how water and shade is provided

PROGRAM COMPONENTS

The following elements of the University's program for heat illness prevention provide specific information for departments and supervisors complying with the program:

a. Provision of Water

Whenever environmental risk factors for heat illness exist, supervisors are responsible to ensure that clean, fresh, and cool potable water is readily available to employees.

Where unlimited drinking water is not immediately available from a plumbed system, supervisors must provide enough water for every employee to be able to drink one quart of water per hour for the entire shift (at least 2 gallons per employee for an 8-hour shift). Smaller quantities of water may be provided at the beginning of the shift if there are effective procedures for replenishing the water supply during the shift as needed.

The OSHA standard requires not only that water be provided, but that supervisors encourage employees to drink frequently. Employees must be understand that thirst is not an effective

indicator of a persons need for water and it is recommended that individuals drink one quart of water, or four 8-ounce cups, per hour when working in hot environments.

Departments shall take one or more of the following steps to ensure employees have access to drinking water:

1. Provide access to drinking fountains
2. Supply water cooler/dispenser and single service cups
3. Supply sealed one time use water containers

Drinking water and water dispensers shall meet the following requirements:

i. All sources of drinking water shall be maintained in a clean and sanitary condition
ii. Drinking water must always be kept cool. When temperatures exceed 90°F it is recommended that ice be provided to keep the water cool.
iii. Potable drinking water dispensers used to provide water to more than one person shall be equipped with a spigot or faucet
iv. Any container used to store or dispense drinking water shall be clearly marked as to the nature of its contents and shall not be used for any other purpose
v. Dipping or pouring drinking water from containers, such as barrels, pails or tanks, is prohibited regardless of whether or not the containers are fitted with covers
vi. The use of shared cups, glasses or other vessels for drinking purposes is prohibited
vii. Non-potable water shall not be used for drinking
viii. Outlets for non-potable water shall be posted in a manner understandable to all employees that the water is unsafe for drinking

b. Access to Shade

Supervisors are responsible to ensure that employees have access to a shaded area. Shaded areas should be large enough to accommodate 25 percent of the employees on a shift and allow employees to sit in the shade without touching each other.

The nearest shaded area must be as close as practicable. Usually this will mean that shade must be reachable within a 2 1/2 minute walk, but in no case more than 1/4-mile or a five minute walk away, whichever is shorter.

Canopies, umbrellas or other temporary structures may be used to provide shade, provided they block direct sunlight. Trees and dense vines can provide shade if the canopy of the trees is sufficiently dense to provide substantially complete blockage of direct sunlight. Areas shaded by artificial or mechanical means, such as by a pop-up canopy as opposed to a tree, must provide means for employees to avoid contact with bare soil.

The interior of a vehicle may be used to provide shade if the vehicle is air-conditioned and the air conditioner is operating.

If the National Weather Service, as of 5 p.m. the previous day, forecasts the temperature to be over 85°F, shade structures must be available at the beginning of the shift and present throughout the day. Regardless of predicted temperatures, supervisors must always have the capability to provide shade promptly if it is requested by an employee. If the temperature exceeds 90°F, shade must actually be present regardless of the previous day's predicted temperature high.

c. Acclimatization

Supervisors are required to acclimatize employees and allow time to adapt when temperatures rise suddenly and employee risks for heat illness increase. Acclimatization may also be required for new employees, employees working at temperatures to which they haven't been exposed for several weeks or longer, or employees assigned to new jobs in hot environments. Generally, about four to fourteen days of daily heat exposure is needed for acclimatization. Heat acclimatization requires a minimum daily heat exposure of about two hours of work. Gradually increase the length of work each day until an appropriate schedule adapted to the required activity level for the work environment is achieved. This will allow the employee to acclimate to conditions of heat while reducing the risk of heat illness.

It should be noted that new employees are among those most at risk of suffering the consequences of inadequate acclimatization. Supervisors with new employees should be extra-vigilant during the acclimatization period, and respond immediately to signs and symptoms of possible heat illness.

d. Preventive Recovery Periods

The purpose of the recovery period is prevention of heat illness. The supervisor is required to provide access to shade for employees who believe they need a preventive recovery period from the effects of heat and for any who exhibit indications of heat illness.

Access to shade must be allowed at all times, and employees must be allowed to remain in the shade for at least five minutes.

The purpose of the preventive recovery period is to reduce heat stress on the employee. The preventive recovery period is not a substitute for medical treatment.

e. Emergency Procedures

If an employee has any symptoms of heat illness, first-aid procedures should be initiated without delay. Common early signs and symptoms of heat illness include headache, muscle cramps, and unusual fatigue. However, progression to more serious illness can be rapid, and can include loss of consciousness, seizures, mental confusion, unusual behavior, nausea or vomiting, hot dry skin, or unusually profuse sweating.

Any employee exhibiting any of the above mentioned symptoms requires immediate attention. Even the initial symptoms may indicate serious heat exposure. If medical personnel are not immediately available onsite and serious heat illness is suspected, emergency medical personnel should be immediately contacted and on-site first aid undertaken. No employee with symptoms of possible serious heat illness should be left unattended or sent home without medical assessment and authorization.

All Supervisors and employees must be trained to recognize and respond to symptoms of possible heat illness.

If any employee exhibits signs or symptoms of heat stroke emergency medical services must be contacted. Supervisors must be able to provide clear and precise directions to the worksite and should carry cell phones or other means of communication to ensure that emergency services can be called.

REPORTING REQUIREMENTS

i. Constant awareness of and respect for heat illness prevention procedures and compliance with all applicable COMPANY safety rules is mandatory.
ii. Employees may report any safety concerns to their supervisor or EH&S.
iii. Supervisors may issue warnings to employees and implement disciplinary actions up to and including termination for failure to follow the guidelines of this program.
iv. Representatives of EH&S are authorized to issue safety warnings to departments, supervisors, and employees and stop unsafe work from continuing.

TRAINING REQUIREMENTS AND COMPETENCY ASSESSMENT

Training shall be provided by Branch Members for all potentially impacted employees, and their supervisors, working where environmental risk factors for heat illness are present.
Training information shall include, but not be limited to:

i. Environmental and personal risk factors for heat illness
ii. Procedures for identifying, evaluating, and controlling exposure to environmental risk factors for heat illness
iii. The importance of frequent consumption of hydrating fluids, up to 1 quart (4 cups of water) per hour, when environmental risk factors for heat illness are present. Particularly when employee is excessively sweating during the exposure
iv. The importance of acclimatization
v. Different types of heat illness and the common signs and symptoms of heat illness
vi. The importance of immediately reporting symptoms or signs of heat illness, in themselves or in co-workers, to their supervisor
vii. Understanding the procedures for contacting emergency medical services, and if necessary, for transporting employees to a point where they can be reached by emergency medical service
viii. Procedures for ensuring that, in the event of an emergency, clear and precise direction to the work site can and will be provided to emergency responders.

Supervisors shall receive training on the following topics prior to being assigned to supervise outdoor employees.

i. The training information required of the employees, detailed above
ii. Procedures supervisors are to follow to implement the provisions of this program
iii. Procedures the supervisor shall follow when an employee exhibits symptoms consistent with possible heat illness, including emergency response procedures

Retraining will be required under any of the following conditions:

i. Changes in the workplace render previous training obsolete
ii. Inadequacies in an employee's knowledge of heat illness prevention indicate that the employee has not retained the required training

Training records shall be maintained on the Company Server for a minimum of 3 years.

Stop Work Authority (SWA) Program:

PURPOSE
The purpose of this procedure is to provide an outline of site/project “stop work authority” for employees, contractors, and visitors.

SCOPE
This procedure describes “stop work authority” program.

POLICY AND PROGRAM OVERVIEW

This program formally establishes the Stop Work Authority (SWA) of all G & W Equipment employees and contractors to stop individual tasks or group operations when the control of safety and/or health risks are not clearly established or understood.

It is the policy of G & W Equipment that:
- All employees and its contractors have the authority and obligation to stop any task or operation where concerns or questions regarding the control of safety and/or health risks;
- No work will resume until all stop work issues and concerns have been adequately addressed, and
- 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 established G & W Equipment disciplinary procedures.

ROLES AND RESPONSIBILITIES

Persons in the following roles have responsibilities in support of this program:

- Company employees and contractors 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 SWA is exercised freely, honor request for “stop work”, work to resolve issues before operations resume, recognized proactive participation and ensure that all “stop work” actions are properly reported with required follow-up completed.
- Branch Managers must establish the clear expectation to exercise SWA, create a culture where SWA is exercised freely, resolve SWA conflicts when they arise and hold those accountable that chooses not to comply with established SWA policies.
- The Safety Committee is 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 a perceived unsafe work actions or conditions.

Much like behavior based safety processes, 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 Instruction

Steps

1. 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.
2. If the supervisor is readily available and the affected person(s) are not in immediate risk, the “stop work action” should be coordinated through the supervisor. If the supervisor is not readily available or the affected person(s) are in immediate risk, the “stop work” intervention should be initiated directly with those at risk.
3. “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.
4. Notify all affected personnel and supervision of the stop work issue. If necessary, stop associated work activities, remove person(s) from the area, stabilize the situation and make the area as safe as possible.
5. All parties shall discuss and gain agreement on the stop work issue.
6. If determined and agreed that the task or operation is acceptable 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.
7. If determined and agreed that the stop work issue is valid, then every attempt should be made to resolve the issue to all affected person’s satisfaction prior to the commencement of work.
8. If the stop work issue cannot be resolved immediately, work shall be suspended until proper resolution is achieved. When opinions differ regarding the validity of the stop work issue or adequacy of the resolution actions, the Branch Manager shall make the final determination.
9. 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.
10. All stop work interventions and associated detail shall be documented and reported to the Safety Committee as detailed in this program.

REPORTING

All “stop work” interventions exercised under the authority of this program shall be documented on the G & W Equipment Incident Investigation Report. “STOP WORK” reports shall be reviewed by line supervision in order to:

- Measure participation;
- Determine quality of interventions and follow-up;
- Trend common issues and identify opportunities for improvement;
- Facilitate sharing of lessons learned;
- Feed recognition programs

The Safety Committee will regularly publish incident details regarding the number of “stop work” actions reported by location as well as details regarding common trends and lessons learned.

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.

RECOGNITION

In order to build and reinforce a culture in which SWA is freely exercised and accepted, line supervisors are encouraged to positively recognize employee and contractor participation in the program.

Minimally, each line supervisor should informally recognize individuals when they exercise their authority to “stop work” or demonstrate constructive participation in a “stop work” intervention. This informal recognition need be no more than an expression of appreciation for a job well done or the awarding of a nominal item (e.g., cap, work gloves, flashlight, etc.) or recognition. Additionally, formal recognition of selected examples of “stop work” interventions and those responsible should be made during regularly scheduled safety meeting.

TRAINING

Training regarding this SWA 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 branch facility safety briefings and regularly in safety committee meetings.

Documentation of all training and reviews shall be maintained as per established procedures. Stop Work Authority cards (see below) can be obtained by contacting your Safety Committee member or Branch Manager

.

Front of card

DO IT SAFELY . . .

Or Not at All.

STOP WORK AUTHORITY
I have the authority & obligation to stop work if any unsafe condition exists or unsafe act occurs

Back of card

STOP WORK AUTHORITY

- ***YOU*** *have stop work authority, and are expected to use it whenever you see something you believe to be unsafe.*
- ***YOU*** *are responsible for your own safety – don't do anything you believe to be unsafe.*
- ***YOU*** *have a responsibility for your co-worker's safety – don't let them do anything unsafe.*
- ***YOU*** *are responsible for reporting all safety incidents to your supervisor, including injuries or accidents you are involved in.*
- ***YOU*** *are expected to report all safety concerns to your supervisor, safety committee, or safety representative. If necessary, elevate the concerns through any other available avenues within the company.*

EMERGENCY ORGANIZATION

President - Michael R. Sabbagh

Operations Manager – David M. Sabbagh

Branches shall post an emergency organization list comprising of manager's name, safety coordinator, and safety committee (if applied), evacuation coordinator, hazardous material coordinator, and emergency squad (if applied).

GENERAL WASTE MANAGEMENT

1. PURPOSE:

G & W Equipment has established this Waste Management Plan to clearly define the minimum practices which are to be employed on a jobsite to assure proper waste handling and diversion of operational waste and re-directing recyclable recoverable resources back into an alternative process. It is for these reasons a Waste Management Plan is to be implemented on each project. While our operations produce very little solid waste materials, the majority can potentially be recycled. Recycling opportunities are evaluated in all areas of our service and maintenance activities. G & W Equipment will be responsible for organizing and placing containers on site and timely removal/replacement when containers are filled to capacity. Periodically, an assessment will take place by the Branch Manager, who will produce a listing of quantity and type of recyclable and hazardous waste material, generated at each facility. Material specific waste hauling containers will be strategically located on the site and will be clearly marked.

2. GENERAL IMPLEMENTATION:

The formalized plan will be shared with all employees located at each facility. All waste handling requirements will be discussed with all employees and any outside subcontractors who appear at the particular facility. This includes sharing procedures for checking collection status and the system for notifying haulers for extra containers or pick-ups. Easy to read signs with written information will be posted in an about the waste and recycling collection areas. Clear labeling of all collection areas will occur. Maps will be provided of the job-site to haulers for dumpster placement and pickup. Implementation of this program will be directly assigned to the proper employee with the appropriate level of authority in the company.

3. EMPLOYEE EDUCATION:

The program treats waste management like a safety program. It integrates proper waste handling and training regarding the importance of recycling into the safety education. The use of signage and simple clear written procedures helps communicate all requirements to employees and subcontractors. All employees on site will be included in the process. This encourages suggestions on more efficient methods of waste handling, or identification of additional materials that can be recycled. In addition any safety hazards associated with the implementation of the program will be specifically addressed as part of the ongoing safety program of G & W Equipment. This specifically includes any hazards associated with exposure to any waste material generated. Any employee or visitor to the site can pass on any problem area observed for immediate corrective action. A copy of the Waste Management Plan will be made available upon request by any employee or any subcontracted employee.

4. AVOIDING ENVIRONMENTAL CONTAMINATION:

The program will take the following measures to see that any impact to the environment is minimized. All containment areas will be clearly labeled including the recycling bins and applicable lists or pictures will be posted of what is recyclable. Trash containers or roll offs will be spotted to collect non-recyclable items. They will be emptied regularly so the overflow does not end up in the recycling bin or creating a contamination problem.

Additionally the following steps will be followed:

a. Conduct regular site visits to verify that bins are not contaminated.
b. Consider bins with lids or locating bins in a locked or supervised area to discourage contamination.

c. Inspect contaminated loads and have the employees and subcontractors pull out the contaminants and segregate them.
e. Call the recycler before drop boxes are full to arrange for pick-up.

HAZARD COMMUNICATION PROGRAM

Introduction

OSHA (The Occupational Safety and Health Administration) have published General Industry Hazard Communication Standards found in 29CFR 1910.1200 which states:
The need for hazard communication safeguards to protect workers from hazardous chemicals.
G & W Equipment recognizes this Standard as our guidance in our Haz Com program.
The purpose of this Hazard Communication Program (HCP) is to ensure that the hazards of chemicals used by our company and contractors are evaluated for safe use and to disseminate relevant information concerning chemical hazards in the workplace to our employees and sub-contractors. At each facility, each Branch Manager, assisted by the Safety Committee, will develop a unique written hazardous communication program for their facility. This program will be composed of the following elements and will be distributed through the following means:

- Our Safety Committee
- This Written Hazard Communication Program
- Container labeling (both our own and the manufacturer, in English)
- Safety Data Sheets (SDSs) in English
- Annual Employee training.

A copy of this HCP will be made available to all employees upon their request. The original HCP document will be kept on file in our office. Contained within will be a list of all current hazardous chemicals known to be present on the jobsite and in current use. For those chemicals no longer used, they will be properly disposed of and the corresponding MSDS or SDS will be filed away in a “Retired Chemical Folder” and retained for a period of up to thirty (30) years. This Program will be reviewed at least annually and revised whenever necessary. All employees will be trained on the hazardous properties of chemicals with which they work and measures they can take to protect themselves from the hazards of these chemicals. This training will take place during their new hire orientation and subsequently on an annual basis, in fulfillment of OSHA requirements. They will also be instructed on proper techniques for emergency response to incidents involving any materials we use.

II. Responsibilities

Provision or Task	Requirement Fulfilled	Revision Schedule
Compiling Chemical Inventory List	**All chemicals used by the company shall be included on the list.**	**Annually and when new products enter into use, or when any changes occur.**
Active SDS Collection, Filing, and Distribution	**SDSs will be obtained immediately from vendors and be placed in a binder and be readily accessible to all employees in a prominent area.**	**Continuous** **SDS’s will be checked for the most current version at-the-least, every five years.**
Inactive SDSs Filing	**SDSs that become inactive**	**Ongoing.**

	will be dated with the inactive date and be held as employee exposure records for duration of not less than 30 years.	
Container Labeling	**Any time chemicals are migrated to other containers, they will be labeled in English with identity and hazards using our company's HMIS. (Haz Mat Information System)**	**Ongoing.**
Employee Training	**Employees training on this HCP will be documented.**	**At time of assignment and when changes occur or at the least, annually.**
All hazardous materials shall be properly stored.	**In accordance with all State, local, EPA and Federal OSHA Standards**	**On going**
Conduit or transport pipes	**All pipes will be labeled as to what is being transported within them, e.g. gas, water, ammonia**	**Reviewed during monthly site inspection and updated accordingly**

Supervisors

Safety is a line management function; therefore, it is the responsibility of all supervisors to:

- Ensure that their employees are informed of this safety program
- Ensure that their employees are complying with this safety program
- Complete an incident report for any employee that reports an injury caused by chemical exposure.
- Conduct frequent and regular inspections of work areas to assure compliance
- Observe employee work habits to see that they are in compliance with the requirements of this safety program.
- Enforce company policy on those employees not compiling with this safety program.

All Employees

Employees are responsible for attending all required training sessions, reviewing and following all applicable provisions set forth by this Safety Program, and providing any information, which may prove beneficial to the revision or implementation of this Safety Program. All employees shall adhere to the following items:

- Do not remove or deface manufactures labels of incoming materials

- Know the location of emergency equipment, exits and first-aid supplies
- Obtain approval to purchase new hazardous materials for the company
- Employees shall notify their supervisor of the following:

- Any symptoms or unusual effects possibly related to the use of a chemical.
- Missing, incomplete, or unreadable labels on containers.
- Missing, damaged, or malfunctioning safety equipment.

Shipping/Receiving Personnel

Employees ordering and receiving NEW materials will be the first to come in contact with these chemicals, therefore; if an SDS is not present or is incomplete, Shipping/Receiving Personnel will notify the purchasing agent to obtain the SDS or obtain one immediately from the vendor or manufacture's website.

Employees receiving materials/chemicals will ensure that all incoming hazardous chemicals are labeled with all manufacture-required information. They will verify that the labels are affixed to the containers and they will reject chemicals with signs of breakage or leakage from the container.

Employees that receive leaking containers:

Hazardous Chemicals that are leaking will not be removed from trucks or accepted by G & W Equipment Employees. If it is later discovered that a leaking container has been accepted, the material will be segregated, contained and stored in a designated waste storage areas. The individual responsible for storing chemicals will report to their supervisor any damaged containers or spills noticed after the material has been received. Go to Appendix E for spill control procedures,

Outside Contractors/Multi-Employer Workplaces

Contractors shall make available to the Branch Manager information about all hazardous chemicals they intend on bringing into our facility or our jobsites, prior to any work starting. In addition, outside contractors will be made aware of the facilities Haz Com program and components contained therein. Examples of these is access to the SDS notebook found unique to each facility, proper labeling procedures for all chemical containers, identification of eyewash stations and first aid kits and the availability of personnel to address any questions outside contractors may have of the chemicals within their proximity.

The Contractor shall notify the company about any precautionary measures, if needed, to protect our employees during the performance of contractual work.

The Contractor Safety Program Acknowledgment Form in Appendix B will be used to document that the contractor is aware of our hazard communication safety program. A copy of this form will be maintained for the length of the contract plus three years.

IV. Hazard Determination

G & W Equipment will rely on the evaluations of the chemical manufacturer or importer, as communicated by the SDS, to determine if materials are hazardous to G & W EQUIPMENT employees. If an employee has a concern about the hazards of a chemical, G & W Equipment's Central Safety Committee will evaluate the SDS to make a determination on the chemical in question.

V. Safety Data Sheets

A library of active and inactive SDSs in English shall be maintained by the Safety Committee. All employees shall have free access to this information at any time during their work shift.

SDS's or copies of SDSs shall also be made available, upon request, to designated representatives of the community, local fire department, the county, the local LEPC (Local Emergency Planning Committee, our employees or any inspectors, such as municipal, county, state, federal OSHA inspector.

Inactive or outdated SDSs will be removed from the facility's active SDS files, marked with the date the material or SDS was placed inactive and filed in the inactive SDSs file. Inactive SDS files are considered employee exposure records and shall be maintained by the company for not less than 30 years.

VI. Chemical Inventories

The company shall maintain a list of all chemicals used or stored. This list shall be used to cross-reference the SDS file to ensure that there is an SDS on file for each hazardous chemical we use. This inventory will be updated annually and when new chemicals are brought into the facility. The master list shall be available to all employees at all times.

VII. Labeling Hazardous Chemicals

Employees shall ensure that all chemical materials are properly labeled at all times. Materials received from manufacturers, importers, or distributors shall be labeled, tagged, or marked with at least the following information:

- The identity name of the hazardous chemical(s) as shown on the SDS;
- Appropriate hazard warnings (any words, pictures or symbols, or combination thereof appearing on a label or other appropriate form of warning which convey the specific physical or health hazard(s), including target organ effects, of the chemical(s) in the container(s); and
- The name and address of the manufacturer, importer, or other responsible party.

VIII. Hazardous Materials Identification System (HMIS)

Employees shall ensure that each container of chemicals is labeled with the identity of the chemical and the appropriate hazard warnings. Employees shall refer to the corresponding SDS to verify label information.

If any unlabeled container is found and its contents cannot be identified, the employee finding the material must notify their supervisor immediately. If proper identification can be made a label with the appropriate information will immediately be affixed to the container. If the material cannot be identified, it will be handled as hazardous waste and properly disposed.

The only exception to using the HMIS is when an employee migrates materials to another container for "immediate-use". If an employee transfers materials from a labeled container to another; the container must have the chemical name noted on the label; it will not need the warning information, provided that the employee transferring the material uses the chemical immediately.

The container will be cleaned, decontaminated or disposed of after use. Otherwise the user must label the container with the appropriate HMIS. Employees shall ensure that labels on containers of hazardous materials are not removed or defaced. Employees must also ensure that all labels are legible, easy to read and prominently displayed on the container.

The Hazardous Materials Identification System (HMIS) label uses four colors: Blue for Health Hazards, Red for Flammability Hazards, Yellow for Reactivity Hazards, and White for Appropriate Protective Clothing and Equipment.

Our HMIS labels (Figure 1A) use a numbering and color system to identify the severity of the hazard in each colored category. These numbers indicate the potential hazard of the substances in the container. The numbers are defined as follows:

0 – Minimal Hazard
1 – Slight Hazard
2 – Moderate Hazard
3 – Serious Hazard
4 – Extreme Hazard

Figure-1A

Under (Blue) Health Hazard:

Under (Red) Flammability Hazard:

Under (Yellow) Reactivity Hazard:

Under (White) Personal Protective Equipment:

Personal Protection Index

A safety glasses
B safety glasses + gloves
C safety glasses + gloves + apron
D face shield + gloves + apron
E safety glasses + gloves + dust respirator
F safety glasses + gloves + apron + dust respirator
G safety glasses + gloves + vapor respirator
H splash goggles + gloves + apron + vapor respirator
I safety glasses + gloves + dust and vapor respirator
J splash goggles + gloves + apron + dust and vapor respirator
K air line hood or mask + gloves + full suit + boots
X ask your supervisor for guidance

IX. National Fire Protection Association System

The National Fire Protection Agency (NFPA) system uses the same colors as the HMIS, but placed into a diamond shape (NFPA 704 Placard). All employees shall be aware of this symbol.

All G & W Equipment facilities shall prominently display this symbol on tanks and the exterior of each facility where chemicals are stored or used. It shall be mounted on the address side of the building and display the most serious hazards likely to be encountered under each of the colored fields. The hazard information will be obtained from the SDS.

Other than the white field, no fields may be left blank and must display at the least, the number zero 0.

Under (Blue) Health Hazard:
- 4 – Deadly
- 3 – Extreme danger
- 2 – Hazardous
- 1 – Slightly hazardous
- 0 – Normal material

Under (Red) Fire Hazard:
- 4 – Flash point below 73o F.
- 3 – Flash point below 100o F.
- 2 – Flash point above 100o F, not exceeding 200o F.
- 1 – Flash point above 200o F.
- 0 – Will not burn.

Under (Yellow) Reactivity Hazard:
- 4 – May detonate

3 – Shock and heat may detonate
2 – Violent chemical change
1 – Unstable if heated
0 - Stable

Under (White) Specific Hazard:	(NO NUMBERS)
Oxidizer	OX
Acid	ACID
Alkali	ALK
Corrosive	COR
Use no water	W with a line drawn through it
Radioactive	International propeller symbol

X. Employee Information and Training

Upon the completion of the hazard communication training, employees will certify that they have been trained on the elements of this HCP with their signature on an attendance sheet.

The sign in sheet will have the topics covered during the training and the date of training. The following elements at a minimum will be covered during the training:

- This Hazard Communication Program including details explaining our labeling system, SDSs program, and training requirements.
- Location of this Written Program, Chemical Inventory, and SDSs
- Accident reporting procedures
- Chemical Spills - Prevention & Response
- Methods and Observations to Detect the Presence or Release of Hazardous Chemicals
- Physical & Health Hazards of Toxic or Flammable Chemicals
- Personal Protective Equipment - Selection, Use and Care
- Work Practices and Engineering Controls
- Emergency Procedures

XI. Non-Routine Tasks

Training: If employees or contractors are assigned to any non-routine task involving hazardous chemicals. The Safety Committee will be notified of such tasks and a written procedure will be provided.

Examples of non-routine tasks may include:

- Confined space entry
- Special Cleaning or Coating Tasks using chemicals
- Equipment Decontamination of blood or human tissue due to an injury
- Chemical Spill Response

APPENDIX A

Definitions of Terms

Acute Effect - Adverse effect on a human or animal that has severe symptoms and develops rapidly.

Carcinogen - a chemical will be considered to be a cancer-causing agent if it is listed as a carcinogen or potential carcinogen on any of the following lists:

1. International Agency for Research on Cancer (IARC), Monograms (latest edition)
2. National Toxicology Program (NTP), Annual Report on Carcinogens (latest edition)
3. OSHA 1910, Subpart Z

Chronic Effect - An adverse effect on a human or animal body, with symptoms that develop slowly over a long period of time or that recur frequently.

Combustible Liquid - any liquid having a Flash Point (F.P.) above 100 F (37.8 C) but below 200 F (93.3 C), except any mixture having components with a F.P. of 200 F (93.3 C) or higher that make up 99% or more of the total mixture volume.

Compressed Gas -

1. a gas or mixture of gases having, in a container, an absolute pressure exceeding 40 psi at 70 F (21.1 C)
2. a gas or mixture of gases having, in a container, an absolute pressure exceeding 104 psi at 130 F (54.4 C) regardless of the pressure at 70 F (54.4 C)
3. a liquid having a vapor pressure exceeding 40 psi at 100 F (37.8 C) as determined by ASTM D-323-72.

Corrosive - a chemical that causes visible destruction of, or irreversible alterations in, living tissue by chemical action at the site of contact. For example, a chemical tested per 49 CFR, Part 173, Appendix A, that destroys or changes irreversibly the structure of the tissue, at the site of contact, following an exposure period of four (4) hours.

Explosive - a chemical that causes a sudden, almost instantaneous release of pressure, gas, and heat when subjected to sudden shock, pressure, or higher temperature.

Flammables -

1. Aerosol - when tested per 16 CFR 1500.45, yields a flame projecting at least 18 inches at full valve opening or a flashback (a flame extending back into the valve) at any degree of valve opening.

2. Gases - a gas that at ambient temperature and pressure forms:
   a. a flammable mixture with air in concentrations of thirteen percent (13%) or less;
   b. a range of flammable mixtures with air, wider than twelve percent (12%) by volume, regardless of the lower flammability limit.
3. Liquid - any liquid having a F.P. below 100 F (37.8 C), except any mixture having components with a F.P. of 100 F (37.8 C) or higher that make up 99% or more of the total mixture volume.

4. Solid - any solid, other than a blasting agent or explosive per 29 CFR 1910.109(a), which is liable to cause fire through friction, absorption of moisture, spontaneous chemical change, or retained heat from manufacturing or processing, or which can be ignited readily and, when ignited, burn so vigorously and persistently as to create a serious hazard. Also, a chemical that, when tested per 16 CFR 1500.44, ignites and burns with a self-sustaining flame at a rate greater than one-tenth of one inch (1/10") per second along its major axis.

Flash Point (F.P.) - the minimum temperature at which a liquid gives off a vapor in sufficient concentrations to ignite.

Hazardous Chemical - Any chemical which has is a physical hazard or a health hazard.

Health Hazard - a chemical, compound, or product for which there is statistically significant evidence, based on at least one study conducted in accordance with established scientific principles that acute or chronic health effects may occur in exposed employees. The term "health hazard" includes chemicals that are carcinogens, toxic or highly toxic agents, reproductive toxins, irritants, corrosives, sensitizers, hepatotoxins, nephrotoxins, neurotoxins, agents that act on the hematopoietic system, and agents that damage the lungs, skin, eyes, or mucous membranes.

Highly Toxic - a chemical that falls into any of the following categories:
1. An oral median lethal dose (LD50) less than 50 milligrams per kilogram (mg/kg) of body weight.
2. An absorbed LD50 less than 200 mg/kg of body weight.
3. An inhalation LD50 less than 200 parts per million (PPM) or 2 milligrams per liter (mg/l).

HMIS - Hazardous Materials Identification System – a labeling system used to identify chemicals and their hazards.

Incidental Spill – A release of any chemical that is limited in quantity and poses no emergency or significant threat to the safety and health of employees. Any spill under 55 gallons will be assessed for potential hazards. If a significant hazard is determined local responders will be called in to mitigate the spill.

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

Incompatible Materials - Mixing some materials can result in heat, fire, explosion, and/or toxic gases. These materials are defined as incompatible materials. For a list of these materials see (Appendix “C”)

Label - written, printed, or graphic material displayed on or affixed to containers of hazardous chemicals.

LC50 - The concentration of a material in air that will kill 50% of a group of test animals with a single exposure usually expressed as parts of the material per million parts of air (ppm), by volume for gases and vapors, or as milligrams of the material per cubic meter of air (mg/m3) for dusts and mists.

LD50 - A single dose of material expected to kill 50% of a group of test animals. The LD50 dose is usually expressed as milligrams or grams of material per kilogram of animal body weight (mg/kg or g/kg). The material may be administered orally or by skin contact.

LEL UEP or LFL - Lower explosive limit, or lower flammable limit, of a vapor or gas. The lowest concentration that will produce a flash of fire when an ignition source (heat, arc, flame) is present. At a concentration below the LEL, the mixture is too "lean" to burn.
When concentrations are too high to burn, (not enough oxygen) the air is above or at the UEL. Upper Explosive Limit LEL and UEL ranges are typically given in percentage, such as 3 to 25%

Mg/m3 - Milligrams per cubic meter which are units used to measure air concentrations of dusts, gases, mists and fumes.

Safety Data Sheet (SDS) - written or printed material concerning a hazardous chemical that is prepared in accordance with the Hazard Communication Standard.

Mitigation – To clean up, neutralize or otherwise make an area safety following a hazmat release.

Mixture - any combination of two or more chemicals if the combination is not, in whole or in part, the result of a chemical reaction.

NFPA - National Fire Protection Association which publishes fire protection standards and has developed a hazard ranking system for classifying areas where hazardous chemicals are stored. Also publishes a Manual of Hazardous Chemical Reactions.

Organic Peroxide - any organic compound that contains the bivalent -0-0- structure and that may be considered to be a structural derivative of hydrogen peroxide where one or both of the hydrogen atoms have been replaced by an organic radical.

Oxidizer - a chemical, other than a blasting agent or explosive per 29 CFR 1910.109(a), which initiates or promotes combustion in other materials, causing fire either of itself or through the release of oxygen or other gases.

PEL - A Permissible Exposure Limit is an enforceable occupational exposure limit established by OSHA. It may be a time-weighted average (TWA) limit, short term exposure limit (STEL), or a maximum concentration exposure limit (ceiling limit).

Physical Hazard - a chemical for which there is scientifically valid evidence that it is a combustible liquid, a compressed gas, explosive, flammable, or organic peroxide, an oxidizer, pyrophoric, unstable (reactive), or water reactive.

Pyrophoric - a chemical that will ignite spontaneously in air at a temperature of 130 F (54.4 C) or below.

Routes of Entry - The means by which a hazardous material may gain access to the body, for example, inhalation, ingestion, and skin contact.

Sensitizer - a chemical that causes a substantial proportion of exposed people or animals to develop an allergic reaction in normal tissue after repeated exposure to the chemical.

Solution or Compound – When two of more materials/elements, combined as a result of chemical reaction or molecular bonding.

Target Organ Effects - the following is a categorization of target organ effects that may occur, including chemicals that have been found to cause such effects. This categorization is not intended to be all-inclusive:

1. Hepatoxins - chemicals that produce liver damage (chemicals - carbon tetrachloride, nitrosamines).
2. Nephrotoxins - chemicals that produce kidney damage (chemicals - halogenated hydrocarbons, uranium).
3. Neurotoxins - chemicals that primarily affect the nervous system (chemicals - mercury, carbon disulfide).
4. Blood or Hematopoietic System - chemicals that decrease hemoglobin functions depriving the body tissues of oxygen (chemicals - carbon monoxide, cyanides, aniline).
5. Lungs - chemicals that irritate or damage the pulmonary tissue (chemicals - silica, asbestos, chlorine gas).
6. Reproductive Toxins - chemicals that affect the reproductive capabilities, including chromosomal damage (mutagens) and effects on fetuses (teratogens) (chemicals - lead, dibromochlorophenyl [DBCP], polychlorinated biphenyl [PCB]).
7. Cutaneous (skin) Toxins - chemicals that affect the dermal layer of the body (chemicals - ketones [acetone], chlorinated compounds).
8. Eye Hazards - chemicals that affect the eye or visual capacity (chemicals - organic solvents, acids).

TLV - Threshold Limit Value is a term used by the American Conference of Governmental Industrial Hygienists (ACGIH) to express the airborne concentration of a material to which nearly all persons can be exposed, day after day, without adverse effects. ACGIH expresses TLVs in three ways:

- TLV-TWA: The allowable Time-Weighted Average concentration for a normal 8-hour workday or 40-hour workweek.
- TLV-STEL: The Short-Term Exposure Limit, or maximum concentration for a continuous 15-minute exposure period (maximum of four such periods per day, with at least 60 minutes between exposure periods, and provided the daily TLV-TWA is not exceeded).
- TLV-C: The Ceiling Exposure Limit--the concentration that should not be exceeded, even instantaneously.

Toxic - a chemical falling within any of the following categories:

- An oral median lethal dose (LD50) greater than 50 milligrams per kilogram (kg/kg) but less than 5000 mg/kg of body weight.
- An absorbed LD50 greater than 200 mg/kg but less than 1,000 mg/kg of body weight.
- An inhalation LD50 greater than 200 parts per million (PPM) or 20 milligrams per liter (mg/l).

Trade Secrets - any confidential formula, patent, process, device, information, or compilation of information (including chemical name or other unique chemical identifier) that is used in an employer's business and that gives the employer an opportunity to obtain an advantage over competitors who do not know or use it.

Unstable (Reactive) - any chemical in the pure state or as produced or transported that will vigorously polymerize, decompose, condense, or will become self-reactive under conditions of shock, pressure, or temperature.

Water Reactive - a chemical that reacts with water to release a gas that is either flammable or presents a health hazard.

Work Area - a room or defined space in a workplace where hazardous chemicals, compounds, or products are produced or used, and where employees are present.

Workplace - an establishment at one geographical location containing one or more work areas.

APPENDIX B [Incompatible Materials]

Acetic Acid	Chromic Acid, nitric acid, hydroxyl-containing compounds, ethylene glycol, perchloric acid, peroxides, and permanganates.
Acetone	Bromine, chlorine, nitric acid, sulfuric acid.
Acetylene	Bromine, chlorine, copper, mercury, fluorine, iodine, and silver.
Alkaline and Alkaline Earth Metals such as calcium, lithium, magnesium, sodium, potassium, powdered aluminum	Carbon dioxide, carbon tetrachloride and other chlorinated hydrocarbons, water, Bromine, chlorine, fluorine, and iodine.
Aluminum and its Alloys (especially powders)	Acid or alkaline solutions, ammonium persulfate and water, chlorates, chlorinated compounds, nitrates, and organic compounds in nitrate/nitrate salt baths.
Ammonia (anhydrous)	Bromine, chlorine, calcium hypochlorite, hydrofluoric acid, iodine, mercury, and silver.
Ammonium Nitrate	Acids, metal powders, flammable fluids, chlorates, nitrates, sulfur and finely divided organics or other combustibles.
Aniline	Hydrogen peroxide or nitric acid.
Bromine	Acetone, acetylene, ammonia, benzene, butadiene, butane and other petroleum gases, hydrogen, finely divided metals, sodium carbide, and turpentine.
Carbon (activated)	Calcium hypochlorite, all oxidizing agents.
Caustic (soda)	Acids (organic and inorganic).
Chlorates or Perchlorates	Acids, aluminum, ammonium salts, cyanides, phosphorous, metal powders, oxidizable organics or other combustibles, sugar, sulfides, and sulfur.
Chlorine	Acetone, acetylene, ammonia, benzene, butadiene, butane and other petroleum gases, hydrogen, finely divided metals, sodium carbide, and turpentine.
Chlorine Dioxide	Ammonia, methane, phosphine, hydrogen sulfide.
Chromic Acid	Acetic acid, naphthalene, camphor, alcohol, glycerin, turpentine and other flammable liquids.
Copper	Acetylene, hydrogen peroxide.
Cumene Hydroperoxide	Acids
Cyanides	Acids
Flammable Liquids	Ammonium nitrate, chromic acid, hydrogen peroxide, nitric acid, sodium peroxide, bromine, chlorine, fluorine, iodine.
Fluorine	Isolate from everything.
Hydrocarbons	Bromine, chlorine, chromic acid, fluorine, hydrogen peroxide, and sodium peroxide.
Hydrocyanic Acid	Nitric acid, alkali.

Hydrofluoric Acid	Ammonia, aqueous or anhydrous.
Hydrogen Peroxide (anhydrous)	Chromium, copper, iron, most metals or their salts, aniline, any flammable liquids, combustible materials, nitromethane, and all other organic material.
Hydrogen Sulfide	Fuming nitric acid, oxidizing gases.
Iodine	Acetylene, ammonia (aqueous or anhydrous), hydrogen.
Mercury	Acetylene, alkali metals, ammonia, fulminic acid, nitric acid with ethanol, hydrogen, oxalic acid.
Nitrates	Combustible materials, esters, phosphorous, sodium acetate, stannous chloride, water, zinc powder.
Nitric acid (concentrated)	Acetic acid, aniline, chromic acid, flammable gases and liquids, hydrocyanic acid, hydrogen sulfide.
Nitrites	Potassium or sodium cyanide.
Nitro paraffin	Inorganic alkalis.
Oxalic acid	Silver, mercury.
Oxygen (liquid or enriched air)	Flammable gases, liquids, or solids such as acetone, acetylene, grease, hydrogen, oils, phosphorous.
Perchloric Acid	Acetic anhydride, alcohols, bismuth and its alloys, grease, oils or any organic materials and reducing agents.
Peroxides (organic)	Acid (inorganic or organic).
Potassium	Air (moisture and/or oxygen) or water, carbon tetrachloride, carbon dioxide.
Potassium Chlorate	Sulfuric and other acids.
Potassium Permanganate	Benzaldehyde, ethylene glycol, glycerin, sulfuric acid.
Silver	Acetylene, oxalic acid, tartaric acid, ammonium compounds.
Sodium Chlorate	Acids, ammonium salts, oxidizable materials and sulfur.
Sodium Nitrite	Ammonia compounds, ammonium nitrate, or other ammonium salts.
Sodium Peroxide	Any oxidizable substances, such as methanol, glacial acetic acid, acetic anhydride, benzaldehyde, carbon disulfide, glycerin, ethylene glycol, ethyl acetate, furfural, etc.
Sulfides	Acids.
Sulfur	Any oxidizing materials.
Sulfuric Acid	Chlorates, per chlorates, permanganates, compounds with light metals such as sodium, lithium, and potassium.
Water	Acetyl chloride, alkaline and alkaline earth metals, their hydrides and oxides, barium peroxide, carbides, chromic acid, phosphorous oxychloride, phosphorous pentachloride, phosphorous pentoxide, sulfuric acid, sulfur trioxide.

APPENDIX C

HANDLING INCIDENTAL SPILLS AND HAZARDOUS MATERIAL EMERGENCIES

Emergency Recognition and Spill Classification:

During a hazardous materials emergency, health and safety can be threatened by chemical exposure, and by physical hazards such as flammable atmospheres. In addition, there may be physical hazards in the environment, such as heat generated while chemicals are reacting.

In all responses to emergencies, the safety of G & W Equipment's employees is paramount, then the containment of the fire, or a chemical spill and/or release. Hazardous material emergencies will be handled only by trained and properly equipped outside rescue personnel such as (fire departments, haz-mats teams, police and ambulance services, etc.).

Chemical Spill Incidents:

The first step during an actual or potential hazardous material emergency is to identify the hazardous material involved and determine the seriousness of the incident. Use at least three source of information.

Response depends on: (1) type and amount of material released (2) containment systems in place (3) possibility for fires, explosions (4) release of toxic fumes or reactions and (5) whether the release occurs in a confined or poorly ventilated space. **If there is any question about whether the spill is within the employee's capabilities, employees shall evacuate the area and notify their supervisor and/or call 911**.

Incidental Spills

An incidental spill is the release of a chemical that is limited in quantity and poses no emergency or significant threat to the safety and health of employees or to those employees that are cleaning it up. Examples of incidental spills may include a leaking 5-gallon container of latex paint or a leak in a 55 gallon drum of motor oil. Employees may mitigate an incidental spill and conduct activities that are not considered to be hazardous.

If an incident is classified as greater than incidental, local first responders will be called in to mitigate the spill. Employees will only respond defensively to protect personnel, property, and the environment and do so from a safe distance, until emergency responders arrive.

When Cleaning Incidental Spills:

- The employee will verify if the spill is incidental by reviewing the SDS and/or the labeling on the container and the quantity of the release. If there is any question about whether or not the spill is incidental, the employee shall notify emergency responders.

- Involving a leaking drums or large containers (FIRST) try righting the drum to a position that stops the flow of material. Then start clean up.

- Only non-sparking tools and equipment will be used with flammable materials.

- Employees will wear proper safety equipment, as specified on the SDS, if contact with the chemical is possible.

- If clothing, skin, or eyes come in contact with chemicals, immediately remove the contaminated clothing and wash skin thoroughly in accordance with first aid instructions on the SDS. Wash your hands and face and remove and wash any outer garments as soon as possible, follow by a shower washing your entire body as soon as practical.

- If conditions change at any time during the cleanup indicating that the safety of the operation is in question, STOP and immediately, evacuate the area, and notify 911.

- All waste will be disposed of in a responsible manner.

Procedures for Cleaning Up Spills

- Small incident spills involving nonhazardous releases shall be safety cleaned up and all clean up materials disposed in the trash and clean up tools shall be washed.

- In the event of an accident on the road involving a G & W Equipment vehicle, G & W Equipment will rely on emergency responders to mitigate such spills.

- Spills in excess of 25 US Gallons shall be immediately reported to NC DENR. (The North Carolina Department of Environmental and Natural Resources), Raleigh Regional Office at 3800 Barrett Drive Raleigh NC, **Phone 919-791-4200**

    1. The caller shall provide the amount and type of chemical spilled. The cause and methods used to prevent further environmental damage, the method of clean up, such as absorption or neutralization and the disposal method for the waste including any generated in the mitigation of the chemical.

        a. All information regarding the spill shall be provided in detail to NCDNER in a letter within two business days of the event and include copies of any pertinent documentation such as SDSs, photographic confirmations, etc.

            Mail to:
            1628 – Mail Service Center
            Raleigh, NC 27699 – 1628
            NCDENR DWM – RRO

Appendix D

PPE Codes

HMIS® Letter	Required Equipment
A	
B	
C	
D	
E	
F	
G	
H	
I	
J	
K	
L through Z	Site-specific label. Ask your supervisor or safety specialist for handling instructions