This Job Site Safety Handbook has been developed for the purpose of communicating the requirements for safe work expected of all Conewago Enterprises, Inc.’s Employees and its subcontractor’s Employees while performing work at any Job Site of Conewago Enterprises, Inc.

This handbook is intended to be used as a source of reference for guidance in conforming to environmental, safety and health requirements and established safe work practices. A detailed company safety manual is available for review by contacting the Conewago Enterprises, Inc. Safety Office. It is not intended that this handbook be used as an all-inclusive manual of environmental, safety and health rules and regulations. It is not a substitute for good, sound judgment and common sense - the basis for effective, safe work habits.

Your individual participation in our Safety Program is just as important to Conewago Enterprises, Inc. as your job skills. You must dedicate your efforts to perform safely. All Employees, contract Employees and sub Employees are required to comply with all environmental, safety and health standards while visiting or performing on-site work, including the following:

- All applicable rules and regulations of the Environmental Protection Agency, the Occupational Safety and Health Administration and any other applicable regulatory governing bodies;
- All federal, state, and local laws, rules and regulations;
- All Conewago Enterprises, Inc. Corporate and Job Site environmental, safety and health policies and procedures;
- Any other applicable environmental, safety and health policies and procedures.

Every Job Site should be continually evaluated to identify recognizable potential hazards. Engineering controls shall be utilized, where practical, to minimize such hazards. Where engineering controls are not feasible or otherwise deemed to be unfeasible, sufficient forms of personal protective equipment shall be utilized and work practices modified to safely perform assigned tasks. Strict adherence to Job Site policies, procedures, rules and work practices on each and every job is required.

**GENERAL RESPONSIBILITIES**

Every individual, whether a Conewago Enterprises, Inc. Employee, contract Employee, sub Employee, vendor or visitor has a duty to conduct themselves in an orderly and sensible manner. You are to safely perform all work assignments by following established safe work practices and utilizing appropriate personal protective equipment. You are to select the proper tools and safety equipment necessary to properly perform the job to which you were assigned. Tools and equipment are to be maintained in a clean, safe, and reliable operating condition and are to be used in a manner consistent with their intended purpose. Each worker is responsible for keeping the work area clean and uncluttered. Stay aware of your surroundings and report any unsafe act or condition to your supervisor or a Conewago Enterprises, Inc. representative immediately. Above all, perform your work assignments in a safe and sensible manner, keeping your safety and the safety of those around you foremost in your thoughts.
JOB SITE RESPONSIBILITIES

Conewago Enterprises, Inc. maintains a program that provides systematic policies, procedures, and practices that, when followed, serve to protect its Employees from, and allow them to recognize, job-related safety and health hazards. The program includes provisions to identify, evaluate, and prevent or control general workplace hazards, specific job hazards, and potential hazards that may arise from foreseeable conditions. Although compliance with the law is an objective, the program will look beyond the specific requirements of law to address all identifiable hazards. Our goal is the prevention of injuries and illnesses, whether or not compliance is at issue.

Conewago Enterprises, Inc. will continually obtain and evaluate information regarding its safety performance and programs. We will use this information to accomplish desired job tasks without compromising the safety and health of its Employees and anyone else in its work area.

Conewago Enterprises, Inc. will provide a site-specific safety orientation to its Employees and subcontractor’s Employees before they are allowed to commence work. This orientation will include site-specific information such as:

1. Specific Client and Conewago Enterprises, Inc. Job Site Safety Policies and Procedures including;
2. Information about the potential for fire, explosion, or toxic release;
3. Chemical hazards related to the specific facility, work and processes;
4. The location of information pertaining to site-specific hazards (MSDS);
5. Job Site requirements for personal protective equipment and safety devices;
6. Information about the alarm signals and what they mean;
7. Directions for proper Employee responses to alarms and emergency signals;
8. Emergency evacuation procedures, safe refuge and reporting requirements;
9. On-site contacts, their names and where they can be found; and
10. The location of the nearest available medical clinic.
EMPLOYEE’S RESPONSIBILITIES

The term “Employees” as referred to in this handbook refers collectively to all Conewago Enterprises, Inc. Employees, its contractors, subcontractors, and their Employees working at the Job Site.

All Employees must ensure they are properly trained to safely and proficiently perform the task to which they are assigned. If in doubt, notify your supervisor to obtain the required training before attempting to perform any questionable tasks. Information relative to the known potential of fire, explosion, or toxic release hazards related to the type of work the Employee is expected to perform will also be communicated to the Employee.

Each Employee must advise the Job Site Safety Coordinator of any observed potential hazards while at the Job Site.

Conewago Enterprises, Inc. or its client will provide MSDS on all chemicals or other potentially hazardous materials to be used by the Employee while working at the Job Site.

Employees must ensure they comply with all standards and governmental regulations pertaining to the work being performed. Conewago Enterprises, Inc. will provide access to written procedures and other applicable governmental rules and regulations associated with Employee’s work.

Every Employee is responsible for ensuring they follow both the safety rules and regulations of the Conewago Enterprises, Inc. Job Site and other applicable safety rules. A Job Site Safety Coordinator will be designated to work with its crew(s) while working at the Job Site. The Job Site Safety Coordinator may be a member of the work crew, such as the supervisor or other person working at the Job Site.

SUBCONTRACTOR JOB SITE SAFETY COORDINATOR

Each subcontractor shall designate a Job Site Safety Coordinator who must establish a working relationship and maintain contact with members of Conewago Enterprises, Inc.’s Job Site team.

The jobsite safety coordinator for each subcontractor must provide proper documentation that he/she has received Basic Safety Training by a recognized course provider. Documentation shall be provided in writing to the Conewago Enterprises Inc. Safety Director prior to the beginning of work onsite. Proof of attendance may be in the form of a course completion card or written certification from the course provider.

The Job Site Safety Coordinator must be aware of potential hazards and the steps taken or to be taken to mitigate such hazards. They must ensure that appropriate personal protective equipment is available and utilized and that work practices be modified, where necessary, to protect Employees.

The Job Site Safety Coordinator must also ensure that Employees comply with applicable safety and health rules and regulations.

Weekly tool-box safety meetings will be conducted for all Employees while working at the Job Site. Each Job Site Safety Coordinator will be responsible for the topic and presentation to their employees. A copy of each toolbox talk shall be available for review by the Conewago Enterprises Inc. Safety Director. The document shall have the signatures of all those in attendance.

It is the responsibility of every Job Site Safety Coordinator to notify the Conewago Enterprises, Inc. Safety Director in the event of injury to any person at the Job Site and prepare and submit an incident report or other appropriate documentation to the Conewago Enterprises, Inc. Safety Department. The Job Site Safety Coordinator may be requested to participate in any incident investigations required.
Workplace Conduct

It is expected that all employees will treat one another with respect.

Conewago Enterprises, Inc. is committed to maintaining a safe, healthful, and efficient working environment where customers and employees are free from the threat of workplace violence. In keeping with this policy “Conewago” prohibits any employee from engaging in any act, either on company premises or during the performance of work-related duties, that:

- Threatens the safety of any person or property.
- Affects the health, life, or well-being of any person.
- Results in malicious damage to any property.

Such acts include, but are not limited to:

- Threatening, intimidating, coercing, harassing, or assaulting an employee or customer.
- Sexually harassing an employee or customer.
- Carrying concealed weapons on company property, or concealing a weapon on company property or jobsites. “Weapons” include (but not limited to) guns, knives, explosives or any other item with the potential to inflict harm.
- Absolutely no firearms are permitted on company property or jobsites.
- Allowing unauthorized persons access to company buildings without management permission.
- Using, duplicating, or possessing keys to company buildings or offices within those buildings without authorization.
- Stealing, or attempting to steal, property of the company, an employee, or customer.
- Damaging, or attempting to damage, property of the company, an employee, or customer.

Reporting and investigation procedures

Any employee (including a supervisor or manager) who has been threatened, is a victim of a violent act, or learns of any threats or violent acts, is to report such activity to their Site Safety Coordinator, the Conewago Enterprises Inc. Site Superintendant, or the Conewago Enterprises Inc. Safety Director immediately. Each report will be promptly evaluated and investigated to determine what follow-up actions are necessary.

Confidentiality:

Information about an incident or threat will be disclosed on a need-to-know basis only, so that a fair and thorough investigation can be conducted and/or appropriate action can be taken. Every effort will be made to ensure the safety and privacy of the individuals involved.
Legal:
An employee who engages in prohibited conduct will be subject to appropriate disciplinary action. In addition, certain actions may cause the employee to be held legally liable under state and/or federal criminal and civil laws.

No Retaliation:
Episodes of workplace violence can only be eliminated if employees are willing and able to report threats, violent acts, and other unsafe conditions without fear of retaliation. To encourage employees to come forward without the fear of retaliation, Conewago promises to promptly investigate all complaints of retaliation, and impose appropriate disciplinary action, up to and including termination.

In the event of an assault:

- Do not approach the aggressor if he/she remains on the scene.
- Assess the situation. Determine if an immediate emergency (fire/ambulance/police) response is warranted.
- Remove yourself from any danger.
- Contact the appropriate authorities (Company officials, Law Enforcement, First Responders, etc.)
- If the incident has potential to further endanger persons or property, activate the company emergency action plan.
- If the aggressor has left the scene or no longer poses a threat, attend to the injured by summoning available on-site emergency responders. Notify the appropriate authorities and remain available for debriefing.
- Secure the work area (including locking down the building) where the disturbance occurred. Assess the work area to ensure it is safe to remain at that location (is there danger of fire, explosion, etc.).
- If the incident does not warrant the activation of the Emergency Action Plan, non-essential personnel should return to their workstations until instructed otherwise.
- Account for all employees, visitors and others and ensure the physical safety of those remaining.
- Provide accurate communication to outside agencies (law enforcement, EMS).
- Refer all requests for information from the media to Human Resources.

GENERAL SAFETY PRACTICES

The following includes, but is not limited to, General Safety Practices which must be followed by all personnel working at a Conewago Enterprises, Inc. Job Site:

1. All employees shall familiarize themselves with the location of First Aid and Eyewash facilities prior to working onsite.
2. Never hesitate to caution someone else when they are in danger of injuring themselves or others.
3. Do not work with defective equipment.
4. Walk; do not run unless you are in danger.
5. Do not work or pass under cranes, hoists, and suspended loads.
6. Hold onto hand rails while ascending or descending stairs.
7. Do not jump from one level to another, use a stairway or ladder.
8. All walking working surfaces with a change in elevation 19 inches or greater require a stairway or ladder.

9. Do not enter into another contractor’s area unless your assigned duties necessitate your being there. If your assigned duties necessitate your presence, verbally notify the contractor of your presence and purpose.

10. Do not take short cuts through anyone else’s worksite.

11. Walk on the left side of the road, facing oncoming vehicles.

12. Do not wear loose clothing or any apparel that can become caught on or in moving equipment.

13. Long pants are required. Pant legs shall not be rolled up to expose skin. Pants with excessive holes, tears or any exposed skin are not permitted.

14. Shirts are required. They must cover the chest and back from the neckline to the beltline with no exposed skin. Tank tops are not permitted. Sleeves must extend at least three inches past the shoulder.

15. Do not wear rings, bracelets or other jewelry when working with machinery.


17. All vehicles being loaded or unloaded must have both rear wheels chocked.

18. While parked, all trailers must have wheels chocked or a parking brake engaged.

19. Everyone shall report any Fire Fighting Equipment deficiencies discovered to the Job Site Safety Coordinator.

20. Fire fighting equipment shall be used for its intended purpose only.

21. Easy access to fire fighting equipment must be maintained at all times. Do not block or otherwise hinder access to any emergency equipment at the Job Site.

22. Conewago Enterprises, Inc.’s Subcontractors are responsible for providing first aid to their Employees but all Job Site personnel shall assist as much as possible in an emergency.

23. All motorized construction equipment shall be equipped with an audible backup alarm and a horn that can be heard above surrounding noise.

24. Portable equipment powered by gasoline, mixed gas, kerosene, diesel fuel, or other combustible or flammable fuel shall be refueled in a safe environment. NO refueling or repairs to fuel lines shall be conducted inside an enclosed structure. Fuels shall not be stored in an enclosed structure unless it has been designed for that specific purpose.

25. The use of personal cell phones is strictly limited to break times and lunch times.

26. No one shall operate motorized equipment, power tools, hand tools or ANY mechanized apparatus while listening or speaking on a cell phone, texting, reading text messages, or sending or receiving electronic messages of any kind during working hours.
SPECIFIC SAFETY RULES AND PROCEDURES

SMOKING

A. Prohibitions

1. Smoking is prohibited within the boundaries of all Conewago jobsites.

DRUGS, ALCOHOL AND CONTRABAND

A. Prohibitions

1. The possession, use and/or sale of any of the following items by any individuals while on Conewago Enterprises, Inc. Job Site premises is strictly prohibited:

   a. Illegal or unauthorized drugs (including excessive quantities of prescription or over-the-counter drugs) and any other chemical substances which may affect one’s mood, senses, responses, motor functions or alter or affect a person’s perception, performance, judgment, reactions or senses while working.

   b. Prescription or over-the-counter drugs which may adversely influence performance or behavior when taken in prescribed quantities, except under the following conditions:

      1) When the Employee has informed his/her supervisor prior to working under the influence of or using such drugs or medication on the job.

      2) The prescription drugs are in the original vials, are labeled with Employee’s name, the physician’s name, prescription number and date of issuance, which should be within one (1) year from the current date, and the physician has indicated that the Employee may work under the influence of such drugs or medication.

   c. Drug-related Paraphernalia – any material or equipment used or designed for use in testing, packaging, storing, injecting, ingesting, inhaling, or otherwise introducing into the human body any illegal or unauthorized, controlled or dangerous substances.

   d. Alcoholic or intoxicating beverages.

   e. Unauthorized firearms, weapons, explosives and ammunition.

2. Reporting to work or working under the influence of detectable levels of unauthorized or illegal drugs and/or alcoholic beverages is strictly prohibited.

B. Enforcement Activities

All Conewago Enterprises, Inc. Employees, subcontractor Employees and visitors to the Job Site shall comply with this requirement related to Drugs, Alcohol, and Contraband Use. Non-compliance can result in immediate termination of employment and removal from the site for all violators. Refusal to submit to a test of blood, breath, or urine for reasonable cause is grounds for removal from the job site and/or termination.

All Conewago Enterprises, Inc. Employees and subcontractor Employees shall be tested for drugs and alcohol whenever involved in an accident or incident that involves personal injury or third party
injury requiring medical treatment beyond onsite First Aid. **Costs of testing will be the responsibility of the company employer.** It is the discretion of the Conewago Safety Director to require alcohol and drug testing for any act involving property damage on a Conewago Enterprises Inc. job site. The results of drug and alcohol testing must be submitted to the Conewago Enterprises, Inc. Safety Director prior to return to work on the job site.

C. Consent

A person’s entry onto Conewago Enterprises, Inc. Job Site premises shall constitute his/her recognition and consent of this policy on Drugs, Alcohol, and Contraband Use.

D. Violations

Violations of this policy will result in immediate removal from Conewago Enterprises, Inc. Job Site premises. The violation of this policy by any Subcontractor’s Employees shall also constitute cause for cancellation of the Contract between Conewago Enterprises, Inc. and such Subcontractor.

**EMPLOYEE ENTRY/EXIT TO THE JOB SITE**

A. Employee Safety Training

1. Every employee is expected to have the required skills and safety training to perform his job prior to beginning work on the jobsite.

2. If Special Training is required for the work assignment of the Employee the subcontractor must provide proof of their participation in and successful completion of an approved Safety Training Program for associated special hazards of the work assignment.

3. Each employee shall signify (See Employee Acknowledgment, page 43) they have reviewed the contents of the Conewago Enterprises Inc. Jobsite Safety Handbook and will abide by all of the rules, safe work practices, programs and procedures described within.

B. Safety Orientations

1. Prior to the commencement of work activities all Employees and subcontractor’s Employees must participate in a Job Site Safety Orientation. The manager assigning the Employee or subcontractor to the Job Site will make arrangements with the Job Site Safety Coordinator to conduct a Safety Orientation.

2. As a minimum, the Employee will be instructed as to his/her responsibilities relating to the following:

   a. Known potential for fire, explosion or toxic release hazards and actions required in an emergency.
   b. Job Site Hazard Communication Systems
   c. Personal Protective Equipment Required by Employee
   d. Personal Protective Equipment provided by “Others”
   e. Location of Safety Supplies, Equipment and Reference Documents
3. The Job Site Contract Coordinator will advise the Conewago Enterprises Inc. Site Superintendent of the names and number of Employees and the nature of the work to be performed, and the anticipated length of the assignment.

4. Any other general or Job Site Rules and Regulations.

C. Entry

1. All Onsite Employees, vendors, delivery persons, and visitors must be readily identified by company logo or other means displayed on their hardhat, work clothes, or Employee Identification Badge. Employees shall not display logos of companies they do not represent.

2. Any visitor, delivery person or vendor who has business at the jobsite is the responsibility of the company responsible for his presence onsite and must be escorted by a representative of the company at all times while onsite.

3. The subcontractor accepts all responsibility for any visitor, vendor, or delivery person, associated with their work onsite.

D. Presence

1. All Employees are required to report to their supervisors when they arrive at their assigned work area and before they depart at the end of the work day.

2. All Subcontractors will advise the Conewago Enterprises Inc. Site Supervisor whenever the subcontractor will have personnel working onsite during hours when the CEI Superintendent or his representative will not be present.

3. Subcontractors are expected to provide supervision of their employees (plus any and all second tier subcontract employees) at all times while work is conducted on their behalf onsite.

4. All vehicles, gang boxes, and other containers capable of concealing drugs, weapons, contraband, or stolen property are subject to search by Conewago Enterprises Inc. at any time while on property under the control of Conewago Enterprises Inc.

E. Exit

1. Upon the end of work each day it is the responsibility of the subcontractor safety coordinator to make sure their work area has been made safe. All openings or other exposed dangers will be covered or barricaded to prevent accidents. Materials must be secured against high winds and other extreme weather conditions. Protect valuables by securing them properly or taking them with you when you leave the jobsite. All fire hazards will be checked for safety. All electrical hazards must be de-energized or otherwise made safe as required by Code and/or OSHA regulations.

F. Vehicle Entry

1. Only necessary work vehicles (used to carry equipment and/or personnel) shall be driven beyond the Job Site entrance.

2. All non-essential vehicles should be parked outside the Job Site in designated parking areas. Visitors, vendors, or delivery persons are not permitted to drive vehicles beyond the jobsite entrance without the express permission of the Conewago Enterprises Inc. Site Superintendent.
3. Drivers must obey and ensure the following general vehicle safety rules:
   a. Pedestrians have the right of way at all times.
   b. All speed limits and other traffic control signs must be obeyed.
   c. No passengers are permitted in the rear of moving pickup trucks. Riding on the side or on the tailgate of any vehicle is strictly prohibited. Personnel may not ride or stand in buckets or ride on any equipment where a passenger seat is not provided.

4. When leaving a vehicle unattended onsite, the ignition must be shut off and the key left in the ignition.

5. Vehicles are not allowed inside partially constructed buildings unless permitted by the Conewago Enterprises Inc. Site Superintendent. **NO** vehicle shall be inside a building with the engine running unless it is engaged in actual construction activities (and is permitted by the Conewago Enterprises Inc. Site Superintendent).

**PERSONAL PROTECTIVE EQUIPMENT**

*Every employee onsite is expected to have their own personal protective equipment maintained in good condition and put to use as needed.*

A. Eye and Face Protection

1. **Safety Glasses are to be worn at all times while at the Job Site.**

2. Safety Goggles are to be worn anytime there are flying particles, sparks, noxious gases, liquid splashes or other type eye hazards present.

3. Face Shields (in addition to Safety Glasses and/or Goggles) are required when working with:
   a. wire brush wheels
   b. grinding/cutting/polishing stone, concrete or masonry
   c. welding
   d. woodworking machines
   e. acids, alkalis, etc.
   f. wood cutting
   g. hoe-ramming
   h. any other activities that could produce splash hazards.

4. Suitable welder’s goggles and properly shaded face shields shall be wore during all welding activities.

B. Foot Protection

1. **Steel-Toed Safety Boots are to be worn at all times while at the Job Site. All boots and shoes will be tied at all times. Boots with cracks that expose skin or socks are prohibited. Boots held together with duct tape or other temporary fasteners are not permitted. (No steel-toed sneakers permitted)**

2. Shock-Resistant, Steel-Toed Safety Shoes are to be worn when electrical shock hazards exist.

3. Chemical Resistant, Steel-Toed Safety Shoes are to be worn when working with acids, alkalis, or other corrosive liquids.
C. **Hand Protection**

1. General purpose gloves will be worn when performing general job site type work to protect the hands from injury.

2. High-quality gloves should be used to lessen the possibility of injury.

3. Gloves should fit snugly.

4. Workers should always wear the right gloves for the job (for example, heavy-duty rubber for concrete work, welding gloves for welding, etc.).

D. **Head Protection**

1. Workers must wear hard hats unless otherwise permitted by the Conewago Enterprises Inc. Safety Director.

2. Inspect hard hats routinely for dents, cracks, or deterioration.

3. If a hard hat has taken a heavy blow or electrical shock, you must replace it even when no visible damage is detectable.

4. Maintain hard hats in good condition; do not drill; clean with strong detergents or solvents; paint; or store them in extreme temperatures.

E. **Fall Protection**

1. Lifelines, safety belts, and lanyards shall be used when a fall hazard exists of a fall greater than 6 feet.

2. Any lifeline, safety belt, or lanyard actually subjected to in-service loading, as distinguished from static load testing, shall be immediately removed from service and shall not be used again.

3. Wherever possible, lifelines shall be secured above the point of operation to an anchorage or structural member capable of supporting a minimum dead weight of 5,000 pounds.

4. Safety belt lanyard shall be a minimum of 1/2-inch nylon, or equivalent, with a maximum length to provide for a fall of no greater than 6 feet. The rope shall have a nominal breaking strength of 5,400 pounds.

5. All safety belt and lanyard hardware shall be drop forged or pressed steel, cadmium plated in accordance with type 1, Class B plating specified in Federal Specification QQ-P-416. Surface shall be smooth and free of sharp edges.

6. All safety belt and lanyard hardware, except rivets, shall be capable of withstanding a tensile loading of 4,000 pounds without cracking or breaking.
HAIR

A. Hair Length
1. Employees working around rotating parts and shafts, such as stock projecting from the chuck of a lathe, shall maintain their hair in a manner so that the hair cannot be caught by the machinery and draw the operator in. This can seriously mangle or crush the operator.

2. Hair should not protrude over one's eyes or otherwise obstruct vision.

B. Facial Hair
1. If an Employee is required to work in an area that could require the use of a respirator, Employee's facial hair (e.g. beards, sideburns, mustaches, etc.) shall not interfere with the face-to-respirator seal or valve function of a respirator.

2. All Conewago Enterprises, Inc. Employees and subcontractor's Employees shall be required to shave any facial hair required to meet established Job Site requirements.

RESPIRATORY PROTECTION

A. General Use and Training
1. If an Employee is required to work in an area that could require the use of a respirator the Employee shall be properly trained and tested for the type of respirator to be used.

2. Tight-fitting respirators shall not be worn by employees who have facial hair or any condition that interferes with the face-to-respirator seal or valve function.

3. Personal protective equipment shall be worn in such a manner that does not interfere with the seal of the sealing of the respirator to the face.

4. Employees shall perform a user seal check each time they put on a tight-fitting respirator using established procedures as per OSHA and the respirator manufacturer's procedures.

B. Care and Maintenance of Respirators
1. All respirators shall be cleaned and disinfected as often as necessary to maintain a sanitary condition for exclusive-use.

Work Activities that may require Respiratory Protection include but are not limited to:

1. Cutting/grinding concrete or other masonry.
2. Working with chemicals.
5. Working with insulation.
6. Housekeeping activities (sweeping, dusting, etc.).
7. Demolition (requires a planned submittal).
8. Confined Space entry.
9. Lead or asbestos removal (requires a planned submittal).
10. Sandblasting.
**HEARING PROTECTION**

All Employees entering any area that has been identified and is posted as a high noise area must use suitable hearing protection. Exposing the ear to high levels of noise may cause hearing loss. Ear plugs and other hearing protection devices shall be available for employees working in a high noise area. Use only approved plugs and replace or clean daily to prevent ear infections.

**PERMIT-REQUIRED CONFINED SPACE ENTRY**

A. **General**

   A Permit-Required Confined Space will be clearly identified as such. It includes any task, vessel, pit, ditch, sewer or other enclosed structure which, by design, has limited opening for entry and exit or where there may be unfavorable natural ventilation which might render the atmosphere of the space flammable, toxic, or oxygen deficient.

B. **Equipment Preparation**

   1. Prior to entry, each confined space shall be inspected for potential hazards by the safety coordinator and personnel conducting the entry. All blinds, blanks, and plugs shall be checked to ensure they have been installed properly.

   2. The Job Site Safety Coordinator will identify any circumstances that dictate extra measures be taken to ensure a safe work condition. These extra measures may include, but are not limited to;

      a. Ventilation,
      b. Lighting & Electrical requirements,
      c. Special Equipment & Tools,
      d. Hot Work requirements, etc.

   3. Forced ventilation (fans, air movers, etc.) shall be used when the Confined Space work requires any type of hot work or if there is a possibility of irritants or toxic atmospheres during the work.

   4. Forced ventilation should also be used to minimize heat if conditions warrant.

   5. Any temporary lighting used in a Confined Space area shall be rated for type of area. Typically vapor proof and explosion proof 12 volt lights with heavy duty cords and insulation shall be used.

   6. Feeders supplying 110 volt temporary lighting being used in the Confined Space must be protected by a ground fault interrupter located outside the Confined Space.

   7. Portable electric tools must either have a three-wire cord with ground and be grounded or be double insulated and protected by a ground fault interrupter.

   8. Cylinders of compressed gas, except self-contained breathing apparatus cylinders, shall never be taken into a Confined Space. Oxygen and acetylene lines used by welders shall not be left unattended in a Confined Space and compressed gas cylinder valves must be closed and disconnected when not in use.
9. Any hot work (welding, cutting, burning, sandblasting, use of electrical tools, or air tools, 
grinder, gouger, etc.) to be done in a Confined Space must be permitted by obtaining a Hot 
Work Permit to do such work.

10. A safe means of ingress and egress (such as portable ladders, hoists, permanent ladders, 
etc.) must be in place at all times. All ingress and egress systems shall comply with OSHA 
standards.

C. Confined Space Atmospheric Testing

1. All Confined Spaces can present hazards such as fires and explosions, oxygen deficiency, 
toxic liquids, vapors, dusts, and other hazards during work. Everyone associated with the 
Confined Space work site must be fully familiar with these hazards and with the methods of 
controlling them.

2. The Job Site Safety Coordinator will identify all recognizable potential sources of physical and 
health hazards such as hydrocarbons, hydrogen sulfide, oxygen deficiency, heat, etc. when 
planning the work.

3. The Confined Space Atmosphere shall be properly tested if there is any chance that the air 
can become oxygen deficient or if harmful vapors may be present or produced during the 
work.

4. The area around the Confined Space will also be tested to make sure that the area is free of 
harmful vapors.

5. All air moving/ventilation equipment must be shut off prior to testing the inside of the Confined 
Space.

6. All testing will be done by trained personnel.

7. To the extent practicable, tests for initial safe entry will be conducted from outside of the 
Confined Space. When these tests cannot be made from outside of the Confined Space, 
safe entry and rescue procedures will be established prior to anyone entering the Confined 
Space.

D. Hazard Assessment

1. After the Confined Space has been tested for oxygen content, flammable vapors, and toxic 
substances, as discussed above, and after the physical condition of the Confined Space has 
been assessed, entry conditions will be noted on the Confined Space Entry Permit.

2. All open Confined Spaces will have a sign posted at its entrance(s) at all times indicating 
whether entry is permitted or if entry is approved and the conditions for which entry is 
permitted.

3. Confined Space entry is generally prohibited if any of the following conditions exist:

   a. Oxygen content is less than 19.5 percent or above 23.5 percent;
   b. Flammable vapors are greater than 5 percent of the lower explosive limit;
   c. Hydrogen sulfide concentration is greater than 10 parts per million;
   d. Airborne concentrations of toxic substances are above levels acceptable to the Job Site 
      and local, state, or federal regulations; or
   e. The physical condition of the Confined Space is not safe for entry based on any other 
      conditions
E. The Permit-Required Confined Space Entry Permit

1. Once the Permit-Required Confined Space is tested and approved for safe entry, the Job Site Safety Coordinator will prepare and sign the Permit Required Confined Space Entry Permit.

2. The Confined Space Entry Permit should include, at a minimum the following:
   a. The identification of the Confined Space to be entered;
   b. The purpose of the entry;
   c. Date and duration of the permit;
   d. Identifiable hazards of the Confined Space;
   e. The measures taken to control the identifiable hazards;
   f. Personal protective equipment and clothing requirements;
   g. Conditions of the Confined Space when approved for entry;
   h. The name(s) of the Confined Space Attendant(s);
   i. The name(s) of Authorized Entrant(s) currently in the confined space;
   j. Communication procedures to be used between Authorized Entrants and the Confined Space Attendant; and
   k. Special conditions/other requirements.

3. Prior to entry, the work crew leader will review and sign the permit as the Work Crew Leader.

4. The Job Site Safety Coordinator will place his/her initials on the Permit, next to the Work Crew Leader, confirming that safety review of the hazards and conditions has been conducted.

5. The completed permit will be hung in a prominent location at or near the entrance to the Confined Space.

6. The Confined Space Entry Permit will be valid for an operations shift. In the event work spans more than one operations shift, the Job Site Safety Coordinator will validate the existing permit within one hour and assume the role of the Entry Supervisor while work continues on the project. All new shift personnel will be given the same briefing and instructions as the original personnel.

7. Any unusual circumstances or change of conditions, such as a hydrocarbon spill or gas releases in the area of the permitted Confined Space, shall void the permit and all persons must be removed from the Confined Space as quickly as possible, until such time as a new permit can issued using the above procedures.

8. To facilitate non-entry rescue, retrieval systems must be used whenever anyone enters a confined space, unless the retrieval equipment would increase the overall risk of the entry or would not contribute to the rescue of the entrant.

9. A properly trained safety watch, or Confined Space Attendant, must be posted at the entrance to any Confined Space when persons are in the Confined Space. The safety watch should maintain communication with those in the Confined Space by signal, voice or others. The attendant must also have an air horn or Job Site radio or other communication device to sound an alarm in case of an emergency situation.

10. The Confined Space Attendant can attempt rescue from outside the Confined Space but shall not enter the confined space.

11. The Confined Space Attendant must monitor the supplied-air respirator equipment (bottle or compressor) to be sure that there is an adequate supply of air and that hoses are free of flowing restrictions.
12. In the event of an emergency, the Confined Space Attendant will have access to at least the same level of protection required of the Authorized Entrants.

F. Continuous/Periodic Monitoring

1. The Confined Space Attendant shall continuously monitor the conditions inside the Confined Space.

2. At least hourly, the results of monitoring shall be recorded on the Permit.

3. If conditions inside the Confined Space reach an unacceptable level, or if there is a sudden, unexplained change in conditions, the Confined Space Attendant must immediately remove the Entrants from the Confined Space and notify the Entry Supervisor immediately.

4. The Confined Space Entry Permit shall immediately be considered void and shall be removed from the entrance to the Confined Space.

5. Reentry shall not be permitted until a new Confined Space Entry Permit has been issued by the Entry Supervisor and reviewed by the Work Crew Leader.

6. The Entry Supervisor shall periodically check the status of the Confined Space throughout his shift.

G. Rescue.

1. Once an unsafe condition occurs or is suspected, the Confined Space Attendant must immediately remove the Entrants from the Confined Space.

2. If the Entrants in the Confined Space cannot exit on their own, the initial response shall consist of the following:
   a. Remember to Remain Calm!!!
   b. Immediately summon for help. The Entry Supervisor and the Conewago Enterprises, Inc. Job Site Safety Coordinator are to be contacted immediately.
   c. Activate the above ground retrieval system.

3. While awaiting assistance, the Confined Space Attendant shall remain in voice contact at all times, if possible, assuring the personnel in the Confined Space that help is on the way.

4. Once help has arrived, all employees are expected to provide any support and assistance required by rescue personnel.

I. Responsibilities

1. Contractor Site Safety Coordinator

   It is the responsibility of the jobsite safety coordinator to contact the nearest EMS service with rescue capabilities and to notify them prior to entry, explaining the purpose and potential hazards of the Permit-Required confined space entry. Upon completion of work the safety coordinator shall contact EMS and report the safe completion of work.

2. The Work Crew Leader is responsible for:
   a. Reviewing the Confined Space Entry Permit with the Entry Supervisor;
   b. Informing the work crew of all information contained on the Confined Space Entry Permit;
c. Informing the Entry Supervisor of the communication procedures to be used between the attendant and the authorized Entrants and recording those procedures on the Permit.

3. The Confined Space Attendant is responsible for:
   a. Staying stationed at the lowest entrance to the Confined Space to assist, communicate, sound emergency alarm, pass tools, etc. to the personnel inside the Confined Space;
   b. Staying in constant contact with all persons in the Confined Space through either visual contact or oral communication;
   c. Maintain the Confined Space Entry Permit and ensure that all entrants;
      i. Are authorized to enter the Confined Space;
      ii. Sign in upon entering the Confined Space;
      iii. Sign out upon exiting the Confined Space.

4. The Safety Watch is responsible for: (Note – The duties for the Confined Space Attendant and the Safety Watch are sometimes combined if conditions warrant.)
   a. Sound emergency alarm and call rescue personnel, if needed; Assist personnel in the Confined Space in work;
   b. Assist in rescue activities if possible from outside the Confined Space; The Safety Watch is never to enter the Confined Space.
   c. Continuously monitor the Confined Space for oxygen content, LELs, and hydrogen sulfide;
   d. Alert personnel in the Confined Space if safe limits are exceeded;
   e. Record the results of monitoring activities.

2. Authorized Entrants are responsible for:
   a. Confirming that they are capable and properly trained for the tasks at hand;
   b. Reviewing the Confined Space Entry Permit with work crew leader prior to entering the Confined Space;
   c. Making sure that all Personal Protective Equipment issued is properly fitted and functioning properly;
   d. Understanding the potential hazards in the Confined Space;
   e. Maintaining constant contact with the Confined Space Attendant while in the Confined Space;
   f. Signing in prior to entering the Confined Space and signing out upon exiting.

HOT WORK PERMITS

A. Approval

1. “Hot Work” means riveting, welding, flame cutting or other fire or spark-producing operations. All hot work must be approved by Conewago Enterprises, Inc.’s Site Superintendent.

2. No hot work shall be performed until all sections of the “Hot Work Permit” form have been completed and signed by the Conewago Enterprises Inc. Site Superintendent or his representative, indicating approval.
B. Fire Watches

1. If the Conewago Enterprises Inc. Site Superintendent determines that a Firewatch is necessary, the personnel doing the Hot Work shall provide a Firewatch.

2. The Firewatch must be sufficiently trained and have no other duties or responsibilities than to monitor the work site for fires.

3. The Firewatch must, at a minimum:
   a. Have a fire extinguisher;
   b. A means to keep the work area wet;
   c. A Fire Alarm Control Switch (if available).

4. Multi-Firewatches may be required for large work areas or overhead work, where sparks might fall into lower levels.

C. Fire Protection and Safety

1. All drainage openings in the vicinity must be covered prior to start of hot work.

2. All combustible, flammable, and other ignitable materials must be removed from the hot work area.

3. Oxygen and acetylene bottles used by welders shall be properly secured and kept away from flying sparks and/or hot metal.

4. All welding or other hot work equipment must be properly grounded.

5. Valves and blinds isolating equipment for hot work shall be properly tagged and locked, where necessary.

LOCKOUT/TAGOUT

A. Preparation for Lockout

1. Any person performing work on any machine or equipment will review the planned work with his or her Site Safety Coordinator.

2. The Site Safety Coordinator shall supervise the process or locating all isolating devices to be certain which switch(es), valve(s), starter(s), or other energy isolating devices apply to the equipment to be locked out.

3. All personnel working on any equipment must be aware of the type and magnitude of energy that the machine or equipment utilizes and must understand the associated hazards.

B. Shutdown

1. Equipment shall be shutdown using established shutdown procedures.

2. All process valves and utilities to and from the machine or equipment will be properly closed and locked.

3. All pressure, liquids and/or gases shall be removed from the machine or equipment.
C. Lock and Tag

1. The contract supervisor, or Site Safety Coordinator, and personnel working on the equipment shall open the main breaker to the machine or equipment; install a hasp and lock to lock the breaker in the off position.

2. The contract supervisor or Site Safety Coordinator shall prepare a tag indicating ownership of the lock and shall place the tag on the lock or chain.

3. All inlets and outlets to steam valves shall be chained and locked in the closed position.

4. All process and utility valves to and from the machine or equipment shall be chained and locked in the closed position.

5. The contract supervisor or Site Safety Coordinator shall check and confirm that valves and switches are in the closed position not leaking.

6. The personnel doing the work must verify that all locks have been installed.

7. The personnel doing the work are responsible for a final check to verify the effectiveness of the lockout and insure that all energy and pressure sources have been dissipated.

D. Lock Removal

1. No locks shall be removed by anyone other than the person who installed the lock or the person to whom ownership of the lock has been transferred during a shift change.

2. When a lock-out runs past shift change, the custody of the lock will be transferred from the personnel going off work to the personnel coming on shift.

3. Upon completion of the work, the personnel performing the work shall notify the Site Safety Coordinator or contract supervisor that the work has been completed.

4. The contract supervisor or Site Safety Coordinator will check the equipment or machinery to insure all guards and safety equipment are in place.

5. Prior to restarting the machinery or equipment, the contract supervisor or Site Safety Coordinator will also ensure that all other locks or tags have been removed and that proper startup procedures are followed.

AERIAL LIFTS

Safe Operating Procedures for Both Man lifts and Scissor Lifts:

- The most important thing to remember before operating any aerial lift platform is always read and follow the manufacturer's safety and operation manual! This information must be kept on the lift.

- Only trained and authorized people should operate the lift. Subcontractor Safety Coordinators must make sure that every operator reads and/or understands the equipment's safety and operating instructions. This includes all of the warning decals and labels mounted on the machine.

- Always check for overhead obstructions before driving or elevating the platform.
• Refuel tanks only when the unit is turned off. If battery powered, the batteries should be charged only in a well ventilated area, away from any open flame.

• Prior to each shift a safety inspection should be completed by the operator; this includes both a visual inspection and a function test. If a problem is found, get the lift repaired.

• Elevate the platform only when it is on a firm, level surface. Although many lifts look like a rough terrain piece of equipment, they are not. Their large tires do allow the equipment to access somewhat difficult areas, but once in position they are designed to be out of level only 5° while in operation. This amounts to 10 inches in a 10 foot wheel span.

• Personal Protective Equipment in the form of a Harness and Lanyard (or retractable MUST be used in shooting boom lifts.

Scissor lifts are efficient one-direction lifts. They provide a solid surface to work from, but always remember:

• Guardrails, midrails and toeboards must be in place. The toe board can be omitted at the door.

• The platform must be equipped with a mechanical parking brake that will hold the unit securely on any slope it is capable of climbing. The brake should be tested periodically.

• Never use the lift's rails, planks across the rails, or a ladder, to gain additional height.

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**ELECTRICAL SAFETY**

**A. General Requirements**

1. Safety-related work practices shall be employed to prevent electric shock or other injuries relating from either direct or indirect electrical contacts, when work is performed on or near energized electrical equipment or circuits. Specific safety-related work practices shall be consistent with the nature and extent of the associated electrical hazards.

2. Live parts to which a worker may be exposed shall be de-energized by properly trained personnel before work is started on or near the device, unless it can be demonstrated 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 volts to ground are not required to be de-energized.

4. If exposed live parts are not de-energized, other safety-related work practices shall be used to protect personnel working on the devices.

**B. Working On or Near Exposed De-energized Parts**

1. All circuits energizing the devices to be worked on shall be properly locked and tagged out prior to any work starting.

2. A qualified person shall verify that the equipment cannot be re-energized and restarted.

3. A qualified person shall verify that the circuit elements and equipment parts are de-energized.

**C. Working On or Near Exposed Energized Parts**

1. Only qualified persons shall be allowed to work on any electrical devices that have not been de-energized.
2. The worker 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.

D. Working On or Near Overhead Lines

1. Lines shall be de-energized and grounded, or other protective measures, such as guarding, isolating or insulating, shall be provided before work is started.

2. When an unqualified person is working in an elevated position near overhead lines, the longest conductive object in their procession cannot come closer to any unguarded, energized overhead line than the following distances and voltages to ground:

   a. 50 kV or below: 10 feet;
   b. Over 50 kV: 10 feet plus 4 inches for every 10 kV over 50 kV.

3. A qualified person working in the vicinity of overhead lines, whether in an elevated position or on the ground, may not approach or take any conductive object without an approved insulating handle closer to exposed energized parts than shown in the table below unless:

   a. The person is insulated from the energized part;
   b. The energized part is insulated both from all other conductive objects at a different potential and from the person;
   c. The person is insulated from all conductive objects at a potential different from that of the energized part;
   d. The qualified person shall adhere to the following Approach Distances:

<table>
<thead>
<tr>
<th>Voltage Range (phase to phase)</th>
<th>Approach Distance (Minimum)</th>
</tr>
</thead>
<tbody>
<tr>
<td>300 V and less:</td>
<td>Avoid contact</td>
</tr>
<tr>
<td>300 V to 750 V:</td>
<td>1 foot</td>
</tr>
<tr>
<td>750 V to 2 kV:</td>
<td>1.5 feet</td>
</tr>
<tr>
<td>2 kV to 15 kV</td>
<td>2 feet</td>
</tr>
<tr>
<td>15 kV to 37 kV</td>
<td>3 feet</td>
</tr>
<tr>
<td>37 kV to 87.5 kV</td>
<td>3.5 feet</td>
</tr>
<tr>
<td>87.5 kV to 121 kV</td>
<td>4 feet</td>
</tr>
<tr>
<td>121 kV to 140 kV</td>
<td>4.5 feet</td>
</tr>
</tbody>
</table>

4. Any vehicle or mechanical equipment capable of having parts of its structure elevated near energized overhead lines shall be operated so that a clearance of 10 feet is maintained.

E. Temporary Wiring

1. Branch circuits shall originate in a power outlet or panelboard.

2. All conductors shall be protected by overcurrent devices.

3. No branch circuit conductors will be laid on the floor located where they may be subject to physical damage.

4. Receptacles shall be of the grounding type.

5. All lamps for general illumination shall be protected from accidental contact or breakage.

6. Temporary lights shall not be suspended by their cords or any metallic fastener.
7. Flexible cords and cables shall be protected from damage, especially passing through doorways or other pinch points.

8. **Extension cord sets shall be of three-wire type** and shall be designed for hard or extra-hard usage. All cords will be checked before use to ensure safety standards.

9. Temporary wiring shall not be run through holes in walls, ceilings, or floors nor shall it be concealed behind walls, ceilings, or floors.

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**CRANE SAFETY**

**A. General Requirements**

1. Only certified and licensed personnel shall be permitted to operate a crane.

2. A substantial and durable load rating chart with clearly legible letters and figures shall be provided with each crane and securely fixed to the crane cab in a location visible to the operator while seated at his control station.

3. All cranes and similar equipment shall have been inspected and certified in accordance with applicable OSHA, ANSI, Federal, State and Local ordinances and regulations, within one year prior to using such equipment in the Job Site.

4. All certification and inspection documents must be made available to the Conewago Enterprises Inc. Site Superintendent or Safety Director upon request.

5. Cranes moving into, within, and out of operating units must have a spotter present to ensure that operating equipment is not accidentally struck.

6. All guards and other load limiting devices specified by the crane manufacturer shall be in place and fully operational.

**B. Handling the Load**

12. No crane shall be loaded beyond 75% of its rated load with all outriggers used unless a critical lift plan has been completed and enacted.

13. The hoist rope shall not be wrapped around the load.

14. The load shall be attached to the hook by means of slings or other approved devices.

15. Hooks shall be equipped with safety latches

16. Only properly trained personnel shall rig loads.

**C. Moving the Load**

1. The crane should be level and properly blocked or balanced during all lifting and moving operations.

2. The load should be well secured and properly balanced in the sling or lifting devices.

3. Before starting to lift and move a load, the hoist rope shall be checked to ensure that it is not kinked and multiple hoist lines are not twisted around each other.
4. The hook shall be brought over the load in such a manner as to prevent swinging.

5. During hoisting, there shall be no sudden acceleration or deceleration of the moving load.

6. Care shall be taken to prevent the load from contacting any obstructions.

7. No personnel shall be on the load or the hook during any hoisting, lowering, swinging, or traveling.

8. The load shall not be positioned over any personnel.

9. Outriggers shall be used in accordance with the Manufacturer’s specifications when the load radius dictates.

10. Neither the load nor the boom shall be lowered below the point where less than two full wraps of rope remain on their respective drums.

11. When two or more cranes are used to lift one load, one designated person shall be responsible for the operation. He shall be required to analyze the operation and instruct all personnel involved in the proper positioning, rigging of the load, and the movements to be made.

12. During transit, the following additional precaution shall be taken:
   a. The boom shall be carried in line with the direction of motion;
   b. The superstructure shall be secured against rotation, except when negotiating turns and the boom is properly supported on a dolly.
   c. An empty hook shall be lashed or otherwise restrained so that it cannot swing freely.

13. Before traveling, with or without a load, a designated person shall be responsible for determining and controlling safety. Decisions such as position of load, boom location, ground support, travel route, and speed of movement shall be controlled by the designated person.

14. When rotating the crane, sudden starts and stops shall be avoided.

15. A tag or restraint line shall be used to control the movement and location of the load.

16. At no time shall personnel be positioned where the load could possibly crush them against a stationary object.

D. Holding the Load

1. The operator shall not be permitted to leave their position at the controls while the load is suspended.

2. No person is permitted to stand or pass under a suspended load.

3. If the load must remain suspended for any considerable length of time, the operator shall hold the drum from rotating in the lowering direction.
E. Personnel Lifts

1. Hoisting personnel by crane is prohibited on all Conewago Enterprises Inc. jobsites without express permission of the Conewago Enterprises Inc. Safety Director. In situations where an exception is granted, the following rules will apply:
   a. There is no safe alternative available and the requirements described below are met;
   b. Cranes used to hoist personnel must be placed on firm ground and the crane must be leveled.
   c. The crane operator must always have full control over the movement of the personnel platform.
   d. Wire rope used for personnel lifting must be capable of lifting seven times the maximum permitted load.
   e. The combined weight of the loaded personnel platform and its rigging must not exceed 50 percent of the rated chart capacity of the crane.

2. The crane must be equipped with:
   a. An anti-two-blocking device that prevents contact between the load block or overhaul ball and the boom tip; or
   b. A two-block damage feature that deactivates the hoisting action before damage occurs.

3. The platform used for lifting must be capable of lifting five times the maximum permitted load.

4. Each personnel platform must be provided with a standard guardrail system that is enclosed from the toeboard to the mid-rail to keep tools, materials, and equipment from falling on personnel below.

5. The platform must have a grab rail, overhead protection, when needed, adequate headroom and a plate or other permanent marking that clearly indicates the platform’s weight and rated load capacity or maximum intended load.

6. A trial lift must be made before any personnel are allowed to be hoisted:
   a. The personnel platform must be loaded to its anticipated lift weight;
   b. The trial lift must start at ground level or at the location where personnel will enter the platform, and proceed to each location where the personnel platform is to be hoisted and positioned.

7. The crane operator must check all systems, controls, and safety devices to ensure that:
   a. They are functioning properly;
   b. There are no interferences; and
   c. All configurations necessary to reach work locations will allow the operator to remain within the 50 percent load limit of the hoist’s rated capacity.

8. After the trial lift, the personnel platform must be hoisted a few inches and inspected to ensure that it remains secured and is properly balanced.

9. A pre-lift meeting must be held with all personnel involved in personnel hoisting (crane operator, signal person, workers to be lifted, and the person responsible for the hoisting operation) to review the requirements and the procedures to be followed.

10. Other Requirements include but are not limited to:
    a. All other requirements relative to crane safety must be followed;
b. Personnel are forbidden to “ride the load,” only platforms (or baskets specifically designed for personnel lifting shall be used to hoist personnel;
c. Use tag lines where practical;
d. All personnel shall keep all body parts inside the platform during raising, lowering, and positioning activities;
e. The platform shall be secured before exiting or entering;
f. Safety belts or harness systems with lanyards must be used. The lanyard must be attached to the lower load block or overhaul ball or to a structural member within the personnel platform.

11. All hoisting operations must cease if there are signs of a severe storm or other impending danger.

F. Lifting over Process Lines and Equipment

1. In general, lifting heavy objects over live electrical or operating lines or equipment should be avoided whenever possible.

2. When such activities cannot be avoided the methods, procedures and guidelines set forth above for personnel lifts are applicable for all loads.

**FORKLIFT SAFETY**

A. General Requirements

1. Only a trained and authorized forklift operator is permitted to drive a forklift.

2. A substantial and durable load rating chart with clearly legible letters and figures shall be securely fixed to the forklift in a location easily visible to the operator.

3. All forklifts and similar equipment shall have been inspected and approved in accordance with all applicable OSHA, ANSI, Federal, State and Local ordinances and regulations.

4. Approved forklifts shall bear a label or some other identifying mark indicating approval by the testing laboratory.

B. Pre-Use Inspections

1. The forklift operator must inspect the forklift at the beginning of each shift before using.

2. The inspection shall include, but not be limited to:
   
   a. Fork pins and stops to make sure that they are in place;
   b. All cowling and body parts;
   c. Wheels and tires for excessive wear;
   d. Fuel levels and fuel lines for seepage or leakage;
   e. Brakes and Steering;
   f. Hydraulics and controls;
   g. Headlights; taillights and warning lights; and
   h. Horns and alarm systems

3. If a forklift is found to be in need of repair, defective or in any way unsafe, the forklift shall be taken out of service until it has been restored to safe operating condition.
C. Forklift Operations

1. Forklifts shall not be driven up to anyone standing in front of a fixed object.
2. No one shall be allowed to stand or pass under the elevated portion of a forklift.
3. No one, other than the operator, shall not be permitted to ride on forklifts.
4. When a forklift is left unattended, forks shall be fully lowered, controls neutralized, power shut off, and brakes set.
5. Operators shall be aware of overhead installations such as electrical lines, pipe racks, etc. and shall maintain sufficient headroom when necessary to drive under those installations.

D. Loading

1. Only stable or safely arranged loads shall be handled. Extreme caution should be exercised when handling off-center loads which cannot be balanced.
2. Only loads within the rated capacity of the truck shall be handled.
3. Forks should be placed under the load as far as possible.
4. The mast shall be carefully tilted backward to stabilize the load.

E. Traveling

1. All traffic regulations shall be observed, including speed limits and right of ways.
2. The driver shall maintain a clear line of vision in the direction of travel.
3. If the height of the load obstructs forward vision, the forklift must be driven in reverse.
4. When it is necessary, a spotter must be present to ensure that operating equipment or overhead structures are not accidentally struck.

LADDER SAFETY

A. Inspections

1. Ladders shall be maintained in good condition at all times.
2. All ladders must be inspected prior to each use. The inspection shall include, but not be limited to:
   a. The joint between the steps and side rails shall be tight;
   b. All hardware and fittings should be securely attached;
   c. Movable parts shall operate freely without binding or undue play;
   d. Frayed or badly worn rope shall be replaced;
   e. Check for missing steps, rungs, or cleats, broken side rails, or other faulty equipment;
   f. Check for proper bases or feet.
B. Safety Precautions

1. The following safety precautions shall be observed in connection with the use of ladders;

   a. Portable rung and cleat ladders shall be used at such a pitch that the horizontal distance from the support to the foot of the ladder is one-quarter (1/4) of the working length of the ladder;
   b. The ladder shall be placed as to prevent slipping;
   c. Ladders shall not be placed on boxes, barrels, or other unstable bases to obtain additional height;
   d. Ladders shall not be placed in front of doors opening toward the ladder unless the door is blocked open, locked, or guarded;
   e. Ladders shall be tied off at the top;
   f. Ladders used to gain access to roof shall extend at least three (3) feet above the point of support;
   g. While climbing a ladder, both hands should be used to hold onto the side rails;
   h. Do not carry tools or other objects in your hands. Use a hand line, if necessary to raise or lower tools;
   i. Do not work from the top three rungs of single or extension rung ladders;
   j. Do not stand on the top two rails of step ladders;
   k. When working from a ladder, both feet must be kept on the ladder rungs or steps;
   l. Your waist must be kept within the boundary of the side rails;

C. Loads

Self-supporting (foldout) and non-self-supporting (leaning) portable ladders must be able to support at least four times the maximum intended load, except extra-heavy-duty metal or plastic ladders, which must be able to sustain 3.3 times the maximum intended load

D. Angle

1. Non-self-supporting ladders, which must lean against a wall or other support, are to be positioned at such an angle that the horizontal distance from the top support to the foot of the ladder is about 1/4 the working length of the ladder.

2. In the case of job-made wooden ladders, that angle should equal about 1/8 the working length. This minimizes the strain of the load on ladder joints that may not be as strong as on commercially manufactured ladders.

E. Rungs

1. Ladder rungs, cleats, or steps must be parallel, level, and uniformly spaced when the ladder is in position for use. Rungs must be spaced between 10 and 14 inches apart.

2. For extension trestle ladders, the spacing must be 8-18 inches for the base, and 6-12 inches on the extension section.

3. Rungs must be so shaped that an employee's foot cannot slide off, and must be skid-resistant.

F. Slipping

1. Ladders are to be kept free of oil, grease, wet paint, and other slipping hazards.
2. Wood ladders must not be coated with any opaque covering, except identification or warning labels on one face only of a side rail.

G. Other Ladder Requirements

1. Foldout or step ladders must have a metal spreader or locking device to hold the front and back sections in an open position when in use.

2. When two or more ladders are used to reach a work area, they must be offset with a landing or platform between the ladders.

3. The area around the top and bottom of ladder must be kept clear.

4. Ladders must not be tied or fastened together to provide longer sections, unless they are specifically designed for such use.

5. Never use a ladder for any purpose other than the one for which it was designed.

SCAFFOLD SAFETY

A: Prior to Erection of All Scaffolding Assemblies

_Everyone’s safety depends upon the design, erection use, and dismantling of scaffolding by COMPETENT PERSONS ONLY._

_Inspect scaffolding before each use to see that the assembly has not been altered and is safe for use._

_Manufacturers and Rental Dealers of Scaffolding issue detailed instructions concerning the erection, use and dismantling of Scaffolding Structures, follow these instructions closely._

_As a minimum, observe the following guidelines when using scaffolding:_

1. The erection site must be inspected to determine ground conditions, strength of supporting structure, and proximity of electric power lines, overhead obstructions, wind conditions, and the need for overhead or weather protection. These conditions must be evaluated and adequately addressed.

2. Frame spacing and sill size can only be determined after the total loads to be imposed on the scaffold and the weight of the scaffold have been calculated.

3. Stationary scaffolds over 125 feet in height must be designed by a professional engineer.

4. All equipment must be inspected to see that it is good condition and is serviceable. Damaged or deteriorated equipment must not be used.

_WARNING: Not all species and grades of lumber can be used as scaffold plank. Wood planks used for scaffolding must be graded as scaffold plank by an approved grading agency, or specifically manufactured for scaffold use._
5. Scaffold plank must be inspected to see that it is graded as scaffold plank, is sound and in good condition, and is free from saw cuts, cracks, notches, splits, delaminations and holes.

6. A fully qualified and competent person can deviate from these guidelines only if it can be shown that the resulting scaffold design complies with applicable codes and generally accepted scaffold engineering practices.

7. The scaffold assembly must be designed to comply with all OSHA, Local, State, and Federal requirements.

B. Erection Of Scaffold.

Scaffold must be erected, moved, or disassembled only under the supervision of competent persons. Safety equipment including safety glasses and hard hats must be worn by all persons erecting, moving, dismantling or using scaffolding.

1. Base plates must be centered on the sills, and be in firm contact with both sills and frame legs. Be especially careful when scaffolds are to be erected on soft or frozen ground. Any part of a building or structure used to support the scaffolding must be capable of supporting the load to be applied.

2. Compensate for uneven ground by using screw jacks and base plates, and sills if required by ground conditions. DO NOT USE unstable objects such as blocks, loose bricks, and similar objects or materials.

3. Plumb and level scaffolding. Be sure scaffold stays plumb and level as erection progresses.

4. Ties, guys, bracing, and/or outriggers may be needed to assure a safe, stable scaffold assembly. The height of the scaffold in relation to the minimum base width, wind loads, the use of brackets or cantilevered platforms, and imposed scaffold loads determine the need for sway and stability bracing.

The following general guidelines apply:

   a. A scaffold must always be secured when the height of the scaffold exceeds four (4) times the minimum base width.

   b. Ties must be placed as near as possible to horizontal members. The bottom tie must be placed no higher than four (4) times the minimum scaffold base width. Subsequent vertical tie placement will depend upon the scaffold width. Scaffolds three (3) feet and narrower must be tied at vertical intervals no more than 20 feet apart. Scaffolds wider than three (3) feet must be tied at vertical intervals no more than 26 feet apart. The uppermost tie should be placed as close to the top as possible and, in no case, more than four (4) times the minimum base width from the top.

   c. Vertical ties must be placed at the ends of the scaffold runs and at no more than 30 feet horizontal intervals in between.

   d. Ties must be installed as the erection progresses, and not removed until scaffold is dismantled to that height.

   e. Side brackets, cantilevered platforms, pulleys, hoist arms, enclosed scaffolds, sloped surfaces, and windy conditions introduce overturning and uplift forces which must be considered and compensated for. These situations require additional bracing, tying, or guying.
f. Circular scaffold erected completely around or within a structure may be restrained from tipping by use of “stand off” bracing members.

g. A free standing tower must be guyed at the intervals outlined above or otherwise restrained to prevent tipping or overturning.

5. Outrigger frames or outrigger units can be used to increase the minimum base width. If used, they must be installed on both sides of the tower.

6. Work platforms must be fully decked with platform units in good, sound condition. Platform units may be individual scaffold grade wood planks, fabricated planks, fabricated scaffold decks or fabricated scaffold platforms.

   a. Scaffold platforms and walkways must be at least 18 inches wide.

   b. Each end of each plank must overlap its support by a minimum of 6 inches or be cleated.

   c. Each end of each platform 10 feet long or less must overhang its supports by no more than 12 inches. Each end of each platform longer than 10 feet must overhang its supports by no more than 18 inches. Larger overhangs must be guarded to prevent access to the overhang. Materials must not be stored on overhangs. Do not stand on overhangs.

   d. Each plank on a continuous run scaffold must extend over its supports by at least 6 inches and overlap each other by at least 12 inches.

   e. Spans of 2 inch by 10 inch nominal scaffold grade plank must never exceed 10 feet. No more than one person must stand on an individual plank at one time. Loads on planks must be evenly distributed and not exceed the allowable loads for type of plank being used.

   f. Secure platform units to scaffolding to prevent uplift caused by high winds or other job site conditions. Use latches, if supplied by platform manufacturer or other suitable means.

7. Guardrails must be used on all open sides and ends of scaffold platforms. Both top and midrails are required. Local codes specify minimum heights where guardrails are required. Use at lower heights if falls can cause injury.

8. Toeboards must be installed whenever people are required to work or pass under a scaffold platform. When materials are to be stacked higher than the toeboard, screening is required from the toeboard or platform to the top guardrail.

9. Access must be provided to all work platforms. If access is not available from the structure, access ladder units, or stairways must be provided. When access ladder units are provided; a rest platform must be installed at vertical intervals of 35 feet or less. Attachable ladder units must extend at least three (3) feet above platforms. Install access ladder units as scaffold erection progresses.

10. Use fabricated decks or cleated planks to minimize platform interference in access areas.

11. DO NOT store materials on side or end bracket platforms.

12. Cantilevered platforms must be specifically designed for that purpose, the frames pinned to prevent uplift and adequate ties provided to prevent overturning.
13. Materials must never be placed on cantilevered platforms unless the assembly has been designed to support material loads by a qualified person. These types of platforms cause overturning and uplift forces which must be compensated for.

14. After erecting scaffold, be sure screw jacks are in firm contact with frame legs.

15. Special care must be taken when putlogs are used:
   a. Putlogs must only be mounted using putlog hangers, with all bolts and nuts installed and tightened.
   b. Putlogs must overhang their supports by at least 6 inches.
   c. Lateral bracing and kneebracing are both required for putlog spans greater than 10 feet.
   d. Putlogs used as side or end brackets require special mountings and special bracing.

16. DO NOT install platforms between free standing towers.

17. Material hoists and derricks should not be mounted on a scaffold unless the scaffold is specifically designed for that purpose.

18. **CHECK THE ENTIRE SCAFFOLD ASSEMBLY BEFORE USE.** Thoroughly inspect the completed assembly to see that it complies with all safety codes, all fasteners are in place and tightened, it is level and plumb, work platforms are fully decked, guardrails are in place, and safe access is provided.

C. **Erection of Rolling Scaffolds**

The following additional precautions apply to the erection of rolling towers:

1. The height of the rolling tower must not exceed four (4) times its minimum base width, or 40 feet, whichever is lower.

   **WARNING: The load rating of the casters used will limit the size, configuration, and load capacity of the rolling tower.**

2. Secure all casters to frame legs or screw jacks with a nut and bolt or other secure means.

3. Screw jacks must not increase the height of the scaffold by more than 12 inches. Towers must be kept level and plumb at all times.

4. Horizontal diagonal bracing must be used at the bottom and top of rolling towers where the top work platform is more than 9 feet above the surface.

5. When rolling towers are to be erected higher than 9 feet, the first brace must be no more than 2 feet above the casters, the others at no greater than 21 foot intervals above. Fabricated planks with hooks may be used as diagonal braces.

6. All frames must be fully cross-braced.

7. Platform units with hooks, or cleated planks, must be used on rolling towers.
D. Use of All Types of Scaffolds

1. Before you use the scaffold, a competent person must:
   a. Inspect the scaffold assembly to be sure it has not been altered;
   b. is assembled correctly;
   c. is level and plumb;
   d. all base plates are in firm contact with sills;
   e. all bracing is in place and securely tightened
   f. all platforms are fully decked;
   g. all guardrails are in place;
   h. safe access is provided;
   i. it is properly tied and/or guyed;
   j. there are no overhead obstructions;
   k. there are no energized electric power lines within 12 feet of the scaffold assembly and;
   l. any deficiencies found are corrected prior to use.

2. Use only proper access. Do not climb cross braces. Do not climb any scaffold component unless it is specifically designed for that purpose. Do not stand on platform overhangs.

3. Climb safely!
   a. Face the rungs as you climb up or down.
   b. Use both hands.
   c. Do not try to carry materials while you climb.
   d. Be sure of your footing and balance before you let go with your hands. Keep one hand firmly on frame or ladder at all times.
   e. Clean shoes and rungs to avoid slipping.

4. DO NOT work on slippery platforms.

5. DO NOT overload platforms with materials. Special care must be taken when putlogs are used.

6. DO NOT store materials on platforms supported by putlogs. They are designed for personnel ONLY.

7. DO NOT extend working heights by standing on planked guardrails, boxes, ladders or other materials on scaffold platforms.
8. DO NOT loosen, detach, or remove any component of a scaffold assembly except under the supervision of a competent person. Components that have been removed must be replaced immediately.

9. DO NOT erect scaffolding on wagons, trucks, or other wheeled vehicles.

10. Stand only within the platform area; do not try to extend work area by leaning out over guard railing.

E. Additional Precautions When Using Rolling Towers

1. DO NOT RIDE MANUALLY PROPELLED ROLLING SCAFFOLD. NO ONE MUST BE ON A ROLLING TOWER WHILE IT IS BEING MOVED.

2. Lock all casters before getting on a rolling tower. Casters must be locked at all times the scaffold is not being moved.

3. DO NOT bridge between rolling towers.

4. Remove all materials from scaffolding before moving a rolling tower.

5. Be sure floor surface is clear of obstructions or holes before moving scaffold.

6. Be sure there are no overhead obstructions or energized electric power lines in the path when moving a rolling tower.

7. Rolling towers must only be used on level surfaces.

8. Move rolling towers from the base level only. DO NOT PULL OR PUSH from the top.

F. Dismantling Scaffolds

The following additional precautions apply when dismantling scaffolding:

1. PRIOR TO REMOVAL OR LOOSENING of any component, consider the effect the removal of the component, or the loosening of a joint, will have on the strength of the remaining assembly.

2. Check to see if scaffolding has been altered in any way which would make it unsafe. If so, reconstruct where necessary before beginning the dismantling process.

3. Use only proper access. Do not climb braces or vertical members. Do not climb scaffold components unless they are specifically designed for that purpose.

4. Do not remove ties until scaffold above has been removed.

5. Visually inspect each plank to be sure it is supported on both ends and is safe to work on.

6. Do not accumulate removed components or equipment on the scaffold.

7. Lower components in a safe manner as soon as dismantled. Do not throw components off scaffold.

8. Stockpile dismantled equipment in an orderly manner.
9. Remove scaffold components immediately after detaching from scaffold.

10. Understanding and following these safety guidelines will increase your personal safety and the safety of your fellow workers.

**MULTI-GAS DETECTORS**

A. Usage

1. When necessary, as in the case of Confined Space Entry, Multi-gas Detectors should be used to check for oxygen, hydrogen sulfide (hydrochloric acid), and L.E.L. of combustible gas.

2. Prior to usage, the instrument will be checked by the Job Site Safety Coordinator. The gas detector shall be calibrated at regular intervals.

3. The Employee’s designated Confined Space Attendant or other person responsible for monitoring the instrument must be able to demonstrate knowledge of its operation and usage.

4. When the use of a multi-gas detector is necessary, the Employee is to record the meter’s readings every hour on forms to be supplied by the Job Site Safety Coordinator.

5. The completed forms are to be attached to the Confined Space Entry Permit or other permit and returned to the Job Site Safety Coordinator.

**TOOLS - HAND AND POWER**

A. General Requirements

1. All hand and power tools and similar equipment shall be maintained in a safe condition.

2. When power operated tools are designated to accommodate guards, they shall be equipped with such guards when in use.

3. Sufficient forms of personal protective equipment shall be worn when necessary to protect one from hazards.

B. Hand Tools

1. The use of unsafe hand tools is strictly prohibited.

2. Wrenches, including adjustable, pipe, end, and socket wrenches shall not be used when jaws are sprung to the point that slippage occurs.

3. Wooden handles of tools shall be kept free of splinters or cracks and shall be kept tight in the tool.

4. The use of “cheater” bars is prohibited.

C. Power-Operated Hand Tools

1. Electric power operated tools shall either be of the approved double insulated type or grounded in accordance with OSHA regulations.
2. Pneumatic power tools shall be secured to the hose or whip by some positive means to prevent the tool from becoming accidentally disconnected.

3. Only those employees who possess a training certification may operate powder actuated tools. Verification of certification must be presented to the Conewago Enterprises Inc. Site Superintendent prior to commencing operations involving powder actuated tools.

D. Abrasive Wheels and Tools

1. All grinding machines shall be supplied with sufficient power to maintain the spindle speed at safe levels under all conditions of normal operation.

2. Grinding machines shall be equipped with appropriate safety guards.

3. All abrasive wheels shall be closely inspected and ring-tested before mounting to ensure that they are free from cracks or defects. Wheels must meet the requirements of the grinding machine.

E. Woodworking Tools

1. All portable power-driven circular saws shall be equipped with guards above and below the base plate or shoe.

2. Guides and templates shall be utilized as much as possible to aid operator in safe operation.

3. All cutting with portable power-driven circular saws shall be on a flat surface that provides adequate friction to prevent movement of the material to be cut.

COMPRESSED GAS CYLINDERS

A. General Requirements

1. Valve protection caps shall be in place when compressed gas cylinders are transported, moved, or stored.

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

3. Compressed gas cylinders shall be secured in an upright position at all times, except, if necessary, for short periods of time when cylinders are actually being hoisted or carried.

4. Cylinders shall be kept at a safe distance or shielded from welding or cutting operations. Cylinders shall be placed where they cannot become part of an electrical circuit.

5. Oxygen and fuel gas regulators shall be in proper working order while in use.

6. Valve protection caps shall be installed immediately after use by the operator using the cylinder.

7. Oxygen cylinders in storage shall be separated from fuel gas cylinders or combustible materials a minimum of 20 feet or by a non-combustible barrier at least 5 feet high having a fire-resistance rating of at least one-half hour.
EXCAVATION AND TRENCHES

A. Definitions

1. Any man-made cut, cavity, trench, or depression in the ground, formed by earth removal is considered an excavation.

2. Excavations and trenches may be considered permit required confined spaces based upon existing or potential hazards. If that is the case, a permit must be filled out prior to personnel entry.

B. General Requirements

1. Excavations must be barricaded to protect pedestrians and vehicles.

2. All excavated material must be piled at least two feet back from the edge of the excavation.

3. All walls and faces of excavations that are greater than four (4) feet deep must be shored or sloped in accordance with OSHA standards to eliminate the hazards of cave-in.

4. A ladder for Employee exit must be provided. An Employee working in the trench must not have to walk more than 25 feet to gain access to the ladder.

5. Personnel are not permitted to work beneath suspended or moving loads of earth during the excavation.

6. The walls (sides) of an excavation cannot be concealed by ANY covering while employees are working within the excavation or during any visual or physical inspection conducted by a competent person.

HOUSEKEEPING

A. Housekeeping – Safety Factor

1. Housekeeping is the responsibility of every individual on the site.

2. Housekeeping is one of the most important factors in accident prevention and is an integral part of safety.

3. Keep all work areas in a neat and orderly manner.

4. Keep all aisles, exits and emergency escape routes unobstructed and otherwise free of debris and other possible tripping hazards.

5. Floors and stairways are to remain free of spills and other slipping hazards at all times.

6. Materials are to be stored only in designated areas and should never block emergency equipment, i.e. fire extinguishers, breathing apparatus, etc.

7. Put trash in trash containers.
HAZARD COMMUNICATION

A. Material Safety Data Sheets (MSDS)

1. All applicable MSDS will be made available for review by Employees when requests for such information are made.

2. The Job Site Safety Coordinator shall provide or otherwise make available to the Employee, the identity and location of potentially hazardous chemicals to which their Employees may be exposed and will supply the Employee the location of a MSDS for those products.

B. Hazardous Product Container Labels

1. All containers of hazardous chemicals or materials received by Conewago Enterprises, Inc. must display a hazard warning label. Such labels must be supplied by the product manufacturer or supplier.

2. Product hazard warning labels or tags must be clearly and conspicuously displayed on each container and shall indicate the identity of the hazardous chemical(s), appropriate hazard warnings; and the name and address of the chemical manufacturer, supplier or other responsible party.

3. The Job Site Safety Coordinator shall be immediately notified of any potentially hazardous material container that has a missing, incomplete or illegible label. A hazard warning label or tag (e.g. NFPA 704M Hazardous Material Labels) shall be placed on such containers. The information for these labels is to be obtained from the product MSDS or from the manufacturer or supplier.

4. Employees are strictly prohibited from removing or defacing any hazardous material label without expressed written permission of Conewago Enterprises, Inc..

5. Portable or other containers into which hazardous chemicals or materials are transferred from the labeled containers shall be labeled with the same identity and hazard warning found on the original container. Such labeling of transfer containers is not required if the contents are intended for immediate use (i.e. same shift).

C. Hazard Communication Program Information

There are numerous chemicals found on typical industrial and commercial Job Sites. The majority of them pose some potential harm. Most of these substances are flammable, ignitable, combustible, or explosive. Others are considered toxic. If used correctly, however, and with the proper protective equipment, chemical hazards can be reduced to a safe level.

1. ALL Subcontractors will ensure their Employees have received formal hazard communication training. All supervisory personnel shall be aware of all available hazard communication information onsite and shall supply its personnel with the information and instruction received from other entities.

2. All subcontractors, vendors, and suppliers will have available and onsite all MSDS pertaining to hazardous materials they bring onsite. That information is to be provided to ANYONE onsite upon their request WITHOUT DELAY. The main repository of all onsite MSDS information shall be the Conewago Enterprises Inc. Site Superintendants office trailer or any other location the Conewago Enterprises Inc. Site Superintendent designates.
3. All Employees will receive information relative to the Job Site’s Hazard Communication Program as part of their Job Site Safety Orientation, including:

(a) The location and availability of the MSDS files and the chemical inventory;

(b) Personal protective equipment and work practices to be used and followed when working with potentially hazardous chemicals or materials; and,

(c) The methods and observations that are used to detect the presence or release of a hazardous chemical in the work area (i.e. chemical monitoring conducted, continuous air monitoring devices, visual inspection of Job Site operations to detect chemical releases, etc.).

WELDING AND CUTTING

These written Welding and Cutting Procedures establish guidelines to be followed whenever employees work with welding and cutting equipment. The requirements are also designed to ensure that procedures are in place to safeguard the health and safety of all employees.

It is our intent to comply with the requirements of 29 CFR 1926.350 through .354. These regulations have requirements for welding and cutting operations. We also comply with applicable requirements of:

- ANSI Z49.1-1967   Safety in Welding and Cutting
- CGA Pamphlet P-1-1965   Safe Handling of Compressed Gases
- 29 CFR 1926, Subpart D   Occupational Health & Environmental Controls
- 29 CFR 1926, Subpart E   Personal Protective Equipment
- 29 CFR 1926.406(c)   Electrical – Special Purpose Equipment
- 49 CFR 171-180   Hazardous Materials Regulations

There are three basic types of welding operations:

- Oxygen-fuel gas welding
- Resistance welding
- Arc welding

Whenever welding, cutting, or brazing occurs, everyone involved in the operation must take precautions to prevent fires, explosions, or personal injuries from exposure to toxic fumes. Even in metal cutting or repair jobs that are considered routine, workers should always follow established safety procedures.

Common place dangers involving welding, cutting and brazing include:

- Damage to eyes and skin from continued or repeated exposure to ultraviolet and infrared rays.
- Closed containers that once held flammables or combustibles.
- Toxic gases, fumes, and dust, which may be released during welding and cutting operations.
- Explosion hazards due to improper ventilation.

Hot Work/Permits

The purpose of the Hot Work Permit Procedure is to prevent potential sources of ignition from causing an unexpected fire. This procedure is mandatory whenever welding, cutting, burning, or grinding operations are performed in locations where a fire may develop. SEE PAGE 20 for more information on Hot Work Permits.
Training:

Only trained and authorized personnel are permitted to operate welding and cutting equipment.

Training should include:

- Compressed gas safety
- Fire prevention
- Respirators
- Confined spaces
- Fall protection
- PPE
- Hazard communications

Maintenance

Any deficiencies found to welding and cutting equipment must be repaired, and the defective parts replaced, before continued use.

Precautions

Protection from burns

- Wear dry, hole-free, insulating gloves.
- Do not wear pants with cuffs, shirts with open pockets or any clothing that can catch and hold molten metal and sparks.
- Wear high-top steel-tipped boots.
- Use approved helmets or hand shields that provide protection for the face, neck, and ears.
- Keep clothing free of grease, oil, solvents, or other flammable substances.
- Remove any combustibles, such as a butane lighter, or matches, from your person before welding or cutting.
- Use noncombustible screens or barriers to protect nearby persons and property.
- Don’t let hot work pieces lay unattended without alerting others of the burn and fire hazards.

Avoid overexposures

- Keep your head out of the fumes.
- Do not breathe the fumes.
- Use mechanical ventilation or exhaust to keep fumes and gasses from your breathing zone.
- If engineering controls are not feasible, use an approved respirator.
- Do not arc weld while standing on damp surfaces.
EMERGENCY RESPONSE PROCEDURES

A. If an Emergency Alarm Sounds

At the first sound of an emergency alarm, all Employees should immediately cease their operations and evacuate to a designated area of safe refuge.

1. Employees should walk to safe refuge via perimeter roads and pathways as shown on the Job Site evacuation route map. Do not walk through the Job Site. To the maximum extent possible, choose a route and area of refuge that will take you upwind of the emergency.

2. Employees are to remain at the designated safe refuge areas until:
   a. All have been accounted for;
   b. You are given further instructions, or
   c. An “All Clear” message has been received over the radio, in which case you may return to work.

B. Turn of all Possible Sources of Ignition

All equipment, tools, vehicles, and other possible sources of ignition should be turned off or otherwise extinguished.

C. Evacuate on Foot in an orderly Fashion

Evacuation should be accomplished on foot. All vehicles should be turned off. Typically no one is allowed to operate a vehicle for any reason during an emergency. The Work Crew Leader is responsible for ensuring that everyone in his/her crew knows the specific Job Site Evacuation Procedures.

C. All Clear Signals

An “All Clear” signal will be sounded to notify everyone when the emergency has been stabilized and clear. At that time, return to your assigned job area or follow the directions of the Work Crew Leader.

The Device used to signal the jobsite of an emergency will be a marine air horn. The emergency alarm will be three blasts on the horn, three consecutive times, totaling nine blasts: 3 blasts, pause, 3 blasts, pause, 3 blasts. The all clear sign will be one prolonged blast. The designated Safe Areas will be the Conewago Site Superintendent’s office trailer and, if that is not accessible, a point at least 100 feet from the rear of the building site. If either or both sites present a danger, then employees should attempt to relocate at the main roadway entrance to the jobsite.
INCIDENT/ACCIDENTS

A. Reporting

1. All incidents that resulted in or could reasonably have resulted in injury, damage to equipment, or release to the environment, must be promptly reported to the Conewago Enterprises, Inc. Job Site Safety Coordinator immediately following the incident.

2. An incident report form should be obtained from the Job Site Safety Coordinator, completed, and turned in within 24 hours.

B. Investigation

1. At the request of the Conewago Enterprises, Inc. Management Team, the following incidents will be investigated to obtain facts relative to the probable cause of the incident and to identify corrective actions to minimize recurrence:
   a. All incidents that resulted in injury;
   b. All incidents that resulted in or could reasonably have resulted in a injury or major damage;
   c. Any other incident for which an investigation is deemed desirable.

2. Any other incident of such magnitude that management deems it necessary will be investigated by an investigation team.

3. Any incident investigation that does not require a team effort will be investigated by at least one of the following:
   a. Job Site Safety Coordinator;
   b. Conewago Enterprises Inc. Site Superintendent
   c. Conewago Enterprises Inc. Safety Director
   d. Other designated person(s).

C. Employee Incidents

1. When an Employee is involved in an incident, the Employee will be expected to summarize the incident in writing and provide the summary to the accident investigator.

2. The Job Site Safety Coordinator must be informed of the results of the investigation and any corrective actions or preventive measures taken as a result of the investigation.
**ENFORCEMENT AUTHORITY**

**A. Expressed Authority**

All Conewago Enterprises, Inc. Employees have the expressed authority, right and responsibility to actively enforce all of the programs and procedures described herein. If given instructions that you believe may be contrary to or in conflict with your own best judgment, you should solicit the input of:

1. Your supervisor or designated Job Site Safety Coordinator, and/or
2. The Conewago Enterprises, Inc. Job Site Superintendent
3. The Conewago Enterprises Inc. Safety Director.

**B. Zero Tolerance**

No one will be allowed to work in violation of the safe work practices, programs, and procedures described herein as well as other generally accepted safe work practices.

Any subcontractor supervisor or jobsite safety coordinator who knowingly permits or authorizes an employee under his control to violate the safe work practices, programs, and procedures described herein will not be allowed to work on a Conewago Enterprises Inc. Job Site until the supervisor’s employer states in writing the steps that have been taken to correct the violation and prevent it from re-occurring.

**C. Question Questionable Conditions**

When you have a question or are unsure of the level of safety relative to a task that you have been asked to perform, or the conditions under which you are expected to perform those tasks, you are expected to ask your supervisor, your designated Job Site Safety Coordinator, the Conewago Enterprises, Inc. Site Superintendent or the Conewago Enterprises Inc. Safety Director until you are satisfied that the work can be performed safely. **The time to inquire is BEFORE you begin a questionable task.**

**D. Conewago Enterprises, Inc. WILL NOT COMPROMISE YOUR SAFETY OR THE SAFETY OF THOSE AROUND YOU FOR ANY REASON.**

**CONCLUSION**

This booklet contains **minimal** safety procedures that should be adhered to while working at a Conewago Enterprises, Inc. Job Site. By following the safe work practices outlined in this booklet, you will contribute significantly to the successful and safe execution of work completed at Conewago Enterprises, Inc. Job Sites.

The Safety Policies and Procedures of Conewago Enterprises, Inc. are a collection of safety requirements adopted over an extended time of continuous safety improvement. Conewago Enterprises, Inc. will continue to observe the activities of its workers and those of others in comparable working conditions. When better safety policies and procedures are discovered and proven, they will be adopted.

When arriving at a Client’s Job Site, Conewago Enterprises, Inc.’s Employees will always adhere to the most stringent requirements specified by either the Client’s safety procedures or Conewago Enterprises, Inc.’s safety procedures.
EMPLOYEE ACKNOWLEDGMENT

I hereby acknowledge receipt of the Conewago Enterprises, Inc. Job Site Safety Handbook.

I have reviewed its contents and agree to abide by all of the rules, safe work practices, programs and procedures described therein, as well as all other Safety and Health and Environmental rules and regulations of a specific Conewago Enterprises, Inc. Job Site.

I further agree to perform all tasks which may be assigned to me in a safe manner, using generally accepted safe work practices and keeping the safety of myself and those around me foremost in my thoughts.

___________________________________
NAME (Please Print)

___________________________________
SIGNATURE

___________________________________
COMPANY NAME

___________________________________
Date

___________________________________
COMPANY JOB SITE SAFETY COORDINATOR CERTIFICATION