



GRADE TECH
POWER SERVICES

GTS Safety Manual

Introduction:

Grade Tech Services adamantly believes that safety is essential. First and foremost we care about employee health and happiness and want to avoid all accidents. We also know that working safely makes projects more efficient and profitable. Join us in working together towards safety.

This booklet along with your new hire orientation are intended to give you the basic knowledge that will keep you safe the first time you set foot on a jobsite. You will continue to receive training from supervisors during the daily **“Take 5” Safety Meetings** and weekly **Safety Topic Discussions**. You will also complete the **OSHA 10-Hour Construction** course online within 90 days of employment.

Please ask your supervisors any questions you have regarding safety. Remember: *The only dumb question is the one that is not asked.*

Your Responsibility:

It is your responsibility to observe all safety rules established for your protection and guidance. You must use the safety equipment required and always work in a way that safeguards you and your fellow workers.

If you are injured on the job, regardless of the severity of the injury, it is your responsibility to report the injury to your immediate supervisor and, if necessary, to promptly obtain first aid.

To work safely you need to be rested, alert, and constantly aware of what is going on around you. Alcohol and drug use on the job is strictly prohibited.

You must know the correct procedures for your job. If you do not understand or have any doubts about a procedure, **STOP** and ask your supervisor.

Safety practices form a defense shield for you and other workers. Don't be the chink in the armor that injures the whole team. By working together, following safety procedures and using good judgment you can prevent accidents.

Accidents don't just happen – they are caused.

General – All Operations:

1. Report to work in good physical and alert mental condition.
2. The use or possession of intoxicating beverages or drugs on the job is prohibited.
3. Obey all special rules, instructions, caution or warning signs, and traffic laws.
4. Understand your work assignment and make certain you are fully qualified for the job.
5. Firearms are not allowed on the job unless for a special purpose and with permission from the Branch/Project Manager.
6. Look for hazards, unsafe conditions or practices, and report them immediately to your supervisor unless you can safely correct the condition yourself and then report.
7. Learn and follow the specific safety practices that apply to your job. If you do not know or understand the safety practices that apply to your job, ask your supervisor.
8. Use the safety equipment and devices provided for your protection. If the required safety devices are not available, ask your supervisor for them before you begin work.
9. Only operate and/or repair machinery equipment or electrical circuits if you are qualified to do so.
10. When lifting, bend your knees and lift with leg muscles, not the smaller muscles of your back. Get help for lifting or moving heavy objects.
11. Do your part to help keep work areas clean and free of debris and other tripping hazards.

12. Know where emergency equipment is located, such as fire extinguishers, first aid supplies, lifesaving equipment, etc. and report the use of any emergency equipment so that it can be replaced.
13. You should not use a cell phone while at work unless it is necessary to complete your assignment.
14. **If you are injured in any way, you must report to your supervisor immediately and obtain first aid or authorized medical treatment. If you need to visit a doctor for any work related injury, notify your supervisor at once.**
15. Disregard of safe work practices or other safety instruction could result in discipline.

Personal Protective Equipment (PPE):

1. You must wear an approved hard hat at all job sites and outdoor work places. Metal hard hats and bump caps are not allowed.
2. Wear the proper clothing for your job, including at least a t-shirt with sleeves, work shoes, and long pants. **In hot substations you are required to wear a Flame Resistant long-sleeved shirt.**
3. You must wear a high visibility vest or shirt when working on the jobsite. This is especially important when working near roads or when you are not in a vehicle. It must have reflectors when working in the dark.
4. Wear steel-toed boots when on the jobsite. This is the only PPE that will not be provided by Grade Tech Services.

5. Wear safety glasses or goggles whenever on the jobsite.
6. Eye protection is always required when grinding, cutting, chipping, welding or using air tools. Face shields are NOT eye protection but may be used with safety glasses or goggles.
7. Use proper respiratory equipment whenever there is exposure to harmful dusts, fumes, vapors, or gases. Your supervisor will help you select the right respirator to protect you.
8. Wear protective gloves and boots whenever working with cement products, acids, or chemicals.
9. You must wear hearing protection such as plugs or muffs as directed, or whenever exposure to noise that exceeds 85 decibels. If you need to shout to converse with a person close by, you should find out if ear protection is required. **If you are not sure, ask your supervisor.**

Machinery and Equipment

1. Only operate, service, or prepare machinery or equipment if you are qualified to do so.
2. Before starting machinery or putting equipment in motion, make certain there will be no danger to other persons or property.
3. If you operate power driven equipment or vehicles you must make a careful walk-around inspection at the beginning and end of each shift. Any defects affecting safety must be reported to your supervisor immediately and be repaired before the equipment is operated.

4. Always use the seat belts when operating motor vehicles or mobile earth moving equipment with a roll over protective structure (ROPS).
5. Never service or repair machinery or equipment while it is in motion. Always lockout machinery or equipment being serviced to prevent injury.
6. If you operate equipment, you are responsible for its safe operation. You must know and follow the safety practices that apply to your equipment and its operation. If in doubt, ask your supervisor before proceeding.
7. When getting on or off equipment always use the stairs or ladder, never try to jump off.
8. Never ride any machinery, equipment, loads, or hooks unless approved safety facilities or devices are used.
9. **Equipment must never be operated within 10 feet of energized high voltage electrical lines of up to 50,000 volts. Higher voltages require greater distances according to state and federal safety regulations.**
10. Crane operators must avoid swinging loads over people. People should be kept away from loads when possible.
11. Always stay outside the area within the swing radius of rotation machines such as cranes, shovels and backhoes.
12. All equipment must be safely parked and secured before it is left unattended, even for short periods. When parking equipment lower all cutting edges, blades, booms, buckets, scraper bowls, etc. to the ground and secure from possible movement.

Excavations and Trenches:

1. Trench and excavation work will be done under the direct supervision of a competent person experienced in trench work and authorized to correct unsafe conditions.
2. All trenches and other excavations five (5) feet or more in depth must be shored, sloped, or otherwise protected from the hazards of moving ground.
3. **Never enter or work in any trench or excavation that is not properly shored, sloped, shielded, or otherwise protected from cave-in.**
4. Use only ladders or other approved means of access to trenches and other excavations. Keep ladders close to the work area - never more than 25 feet away.
5. When working in trenches stay away from the excavating equipment, and stay within the shoring, sloping or protection.
6. Use only safe crossings for crossing open trenches, **never jump over an open trench.**
7. The spoil pile must be kept at least two (2) feet away from the edge of excavation, and heavy equipment should be kept as far away as possible.
8. Keep alert for changing ground conditions, signs, or possible movement.

Working in Hot Substations:

1. Hot substations are energized and have electricity flowing through them. There will always be an electrically qualified person on site supervising work and correcting unsafe conditions.
2. **Fire Resistant shirts must be worn at all times.** You are also required to wear a hard hat, a high visibility vest, safety goggles and steel-toed boots.
3. Spotters are required when using machinery around any steel structures, electrical equipment, overhead wires, or concrete footings. At least one spotter is required, two or more are preferred.
4. You are never allowed to touch or work on electrical equipment.
5. You are never allowed to cut any electrical cables. If you encounter cables while digging contact the electrically qualified person on site.
6. If any steel structures, electrical equipment, overhead wires, or concrete footings are hit with machinery, even in the smallest way, you must notify your supervisor and the electrically qualified person on site.

Spotting Technique:

1. When working around excavations, structures, overhead wires or other dangers, **especially in hot substations**, a spotter is required at all times. This person alerts the machine operator if they approach hitting any object or element of danger.
2. The spotter acts as the eyes for what the operator can't see and must be 100% alert.
3. They must be able to communicate to the machine operator both visibally and verbally.
4. Spotters are required when ever a semi-truck is backing up.

Confined Spaces:

1. Confined space and enclosed space work will be done under the direct supervision of a competent person, experienced in confined space work, and authorized to correct unsafe conditions.
2. Never enter into any confined or enclosed space (bin, bunker, tank, vault, manhole, pipeline, deep excavation, etc.) unless you have been trained in confined space operating procedures.
3. Never enter a confined space that has not been tested for proper ventilation and the presence of dangerous or poisonous gasses.

4. Only enter with proper safety devices such as a lifeline and only with another person standing by for help if necessary.

Hand and Portable Electric Tools:

1. **Always use the right tool for the job.**
2. Do not use defective, dull or damaged tools.
3. Report any defective tools or equipment to your supervisor.
4. Keep guards and safety devices in place and functioning properly. Inspect electric cords, plugs, and receptacles before use and have them repaired or replaced if worn or damaged. Electric cords should not be spliced or taped.
5. Make certain that all electric hand tools and exposed non-current carrying parts of motors, generators (including portable), and control equipment are properly grounded.
6. Do not use the power cord to lift or lower portable electric tools.

Fire and Flammable Materials:

1. All flammable liquids are to be stored only in approved closed metal containers labeled FLAMMABLE.
2. Keep combustible waste materials picked up and discarded regularly (daily).
3. Know the location and proper use of fire extinguishers and use them only for firefighting.

4. Use proper precautions when transferring fuel or refueling equipment, stop the motors and provide for grounding and bonding.
5. Do not smoke or allow open flame or any other source of ignition in fueling areas. Close containers and eliminate any spillage.
6. Oxygen and acetylene cylinders are to be secured upright, stored separately (at least 20 feet apart) and not near other combustible materials, particularly oil and grease.
7. Never weld, burn, or cut any containers that have held flammable liquids unless they are filled with water or are completely cleaned, ventilated and tested.
8. Never use gasoline for cleaning purposes. Use only approved cleaning solvent in well-ventilated areas.

First Aid:

1. Know the location of first aid materials and obtain first aid for all injuries, no matter how minor.
2. Never try to move an injured or seriously ill person unless it is necessary to prevent further injury.
3. If you hold a current first aid card, such as one issued by the Red Cross or the Mine Safety and Health Administration, please let your supervisor know. You are encouraged to participate in first aid training that may be made available to you.

Housekeeping

1. Do your part to keep work areas, ramps, platforms, access roads or paths clear of debris that creates tripping and fire hazards.
2. When stripping forms always pull or bend down any protruding nails.

Safety Meetings:

1. **“Take 5” safety meetings** and **Safety Topic (Toolbox) discussions** are held for you benefit. You are required to participate in them before work each day. You are encouraged to offer suggestions for improving safe work conditions and practices at these meetings.

Ladders, Scaffolds and Safety Harnesses:

1. Use only well-built undamaged ladders of the proper size. Portable ladders should be long enough so that side rails extend at least thirty-six (36) inches above the landing. Fixed ladders should be long enough so that the side rails extend at least forty-two (42) inches above the landing.
2. Always face the ladder when going up or down and do not carry tools or materials. Use a hand line to lift tools or materials.
3. Secure ladders from falling by setting feet properly and tying off. The base of the ladder

should be set back a safe distance from the vertical – about one-fourth the working length.

4. All scaffolds must be built to support at least four times the maximum expected load.
5. Scaffolds must be built plumb and level. All scaffold planking must be secured.
6. Guardrails are required for scaffolds and platforms of any kind that are 6 feet or more above ground or another level. Guardrails must support at least 200 pounds.
7. When building scaffolds, you must tie-off 100% of the time until all guardrails are completed.
8. Before using scaffolds or other platforms check them for security, proper planking, and guardrails.
9. Never throw anything up or down from a scaffold.
10. Do not use single plank for ramp access to work areas. A ramp must be at least 20 inches wide and have handrails if 6 feet or more high.
11. Keep ramps and platforms clear of debris and unnecessary tools or materials.
12. **Report any improper or unsafe ladders or scaffolds to you supervisor.**
13. Approved safety harnesses with lifelines or **lanyards must be worn when you are exposed to falls from heights of 6 feet or more**, or would otherwise require guardrails or other fall protection.
14. An approved safety harness with a lanyard must be worn when you are working from a scissors lift, man basket, or other elevating work platform.

Hazardous Substances:

While working you could be exposed to many different materials determined to be hazardous substances if they are not handled safely.

In order for you to protect yourself it is important that you know what information about hazardous substances is available and how to use it. We maintain a material safety data sheet (MSDS) for each of the hazardous substances we use and that you may be exposed to. An MSDS is a technical document that supplies important information about a particular hazardous substance or mixture of substances. When we talk about hazardous substances, we want you to know that you have some specific rights that include:

1. The right for you, your physician, or your collective bargaining agent to receive information, including an MSDS, about hazardous substances you are exposed to.
2. The right not to be discharged or discriminated against for requesting information about hazardous substances.

These are the rules you must follow when using hazardous substances.

1. Never use any chemical or substance until you have read the label or the MSDS.
2. **If you have questions or have not been instructed on the safe use of hazardous substances ask your supervisor.**

Medical Treatment – Injury Reports:

During your employment you are covered by Workers' Compensation for medical treatment and disability due to an injury at work. To receive these benefits, you must:

- 1. Report any work-connected injury or illness to your supervisor immediately (no matter how minor the injury may be).**
2. Obtain prompt medical attention if necessary. Do not wait until it is convenient later.
3. Get authorization from your supervisor for medical treatment. You should go to one of the recommended doctors; they are well qualified for Workers' Compensation cases.
4. Inform your supervisor through the job office if you are unable to return to work because of injury.

If you go to a doctor on your own, without notifying your supervisor or the job office, you may be held responsible for payment of bills or lose your eligibility for disability benefits.