

Safety Rules for Subcontractors and Subcontractor Personnel

While working at the project owner's facility, including the property that is adjacent hereto ("Facility"), Subcontractor personnel including Subcontractor employees, Subcontractor's subcontractors, agents, servants and representatives ("workers"), shall have knowledge of and comply with the rules in this booklet as well as applicable local, state, and federal laws and regulations.

Workers may confront potentially unsafe conditions at any jobsite. For this reason and before starting work, workers shall become familiar with these rules and safety responsibilities they are expected to assume while working at this facility. If at any time Great Arrow Construction (GAC) determines that a worker is violating any rule mentioned herein and that the violation jeopardizes the workers welfare or the welfare of others, GAC reserves the right to expel the worker from the Facility.

Subcontractor will be responsible to provide a MSDS for each hazardous material that it will use or bring onto the job site in the course of performing the Work. No hazardous material shall be used in any manner or removed from its original packaging until the subcontractor has submitted a proper MSDS to the Contractor's site superintendent and received approval from the Contractor to proceed with the intended use of such materials. Any hazardous material in containers without proper labeling will not be permitted on the job site. Subcontractor further acknowledges that all of its employees assigned to this work have already received hazard communication training as required by 29 CFR 1910.1200.

The Contractor will schedule regular safety meetings in the job site trailer or other location as may be required to ensure safe working conditions at the facility. Any Subcontractor who misses a safety meeting may be prohibited from proceeding with the work at its own expense until such time as it can be demonstrated to the satisfaction of the Contractor that the Subcontractor is fully prepared and trained as required by law to proceed with the work.

If a worker does not clearly understand these rules or if safety problems arise which are not covered by these rules, he or she shall consult their GAC contract before proceeding.

Safety Rules for Subcontractors and Subcontractor Personnel

- 1. Workers shall obey all warning and instructional signs at the Facility.
- 2. No smoking is permitted at the Facility except in designated locations.
- 3. Workers are restricted to the areas where they are performing work. Workers shall use sanitary facilities (toilets, wash-up stations, etc.) provided by or specific facilities designated by GAC.
- 4. Gasoline and other flammable liquids shall not be used or stored at the Facility without the permission of GAC.
- 5. No horseplay or other unsafe acts are permitted.
- 6. Workers shall not possess or use alcohol or drugs at the Facility or work at the Facility under the influence of alcohol or drugs. Also, while working at the Facility, workers may not use prescription drugs that may affect their reflexes or actions.
- 7. Theft, trespassing, assault and possession of firearms or other weapons are prohibited.
- 8. In areas where a combustible material is present, no "hot work" shall be started until measures are taken to detect and eliminate the chance for an explosion or fire. The term "hot work" includes the use of explosives, torches, appliances, tools, or equipment producing spark, flame, or ignition. "Hot work" also includes, but is not limited to, the following:

- a. Acetylene burning torches.
- b. Electric and gas welding equipment.
- c. Nelson stud and spot welders.
- d. Sandblasting equipment.
- e. Open fire (salamanders, heaters, etc.).
- f. Soldering irons.
- g. Non-explosive proof electric motor driven tools or equipment.
- h. Electrical heating elements.
- i. Tar pots and melting pots.
- j. Powered wire brushing.
- k. Lead burning.
- 1. Blow torches and Presto-lite outfits.
- m. Internal combustion engines.

Specific approval must be obtained from GAC before bringing in, locating, and operating a combustion engine in the Facility. These engines may be on portable air compressors, welding machines, etc.

- 9. Permission of GAC must be obtained in advance each time a worker:
 - a. Uses or operates valves or other control devices on Facility equipment
 - b. Works on lines and tanks.
 - c. Ties-in electrical or piping to existing facilities
 - d. Removes equipment from the Facility.
 - e. Removes blanks from lines or piping.
 - f. Begins excavation work.
- 10. Authorization mast be obtained from GAC and from the Facility person in charge of the area when performing any work on electrical circuits, wiring and electrically operated equipment, etc., equipment that is ties into existing Facility electrical systems or circuits. This includes motors, breakers, and transformers or any work requiring lock-out/tag-out procedures.
- 11. A worker shall not operate any valves or tamper with controls unless specifically authorized to do so or turn on or off any electricity, gas, air, water, etc. or set in motion any machinery or electrical apparatus without proper authorization.

No work shall be preformed on any equipment, machinery, power tools, etc. until positive measures have been taken to insure that the power source is shut off and cannot be turned on while work is in progress. Qualified electricians requires to work on live electrical circuits, or changing breakers "hot" shall follow specific safety procedures for that specific job. No one should remove a protective device until all employees have completed their work and are in a safe position.

Electrical or electrically driven equipment shall have the switch or breaker to that equipment positively locked out. Workers shall test (before the work is started) to be sure that the switch or breaker has actually shut off power. If for any reason the switch cannot be locked out, the worker shall not start the work.

Steam, air or gas-powered equipment shall have the closed power valve secured against accidentally opening by a lock or locked chain and by firmly attaching a "DO NOT OPEN" tag to the wheel or plug. The tag must be visible from the operating position. The supply lines must be blanked if the closed control valve or block valve leaks.

- 12. A worker shall not enter an existing tank, underground sewer, electrical vault, or other confined enclosure until he or she can ensure proper confined space entry procedures.
- 13. All damage to the owner's equipment, piping, or wiring must be reported to GAC immediately. All improperly-installed or inoperable equipment, whether new, temporary, or existing, must be reported to GAC immediately.
- 14. All personal injuries to a worker at the Facility shall be reported to GAC immediately. If immediate reporting is not feasible, all such injuries shall be reported as soon as possible and not later than 24 hours after the injury.
- 15. Subcontractor employees shall clean up debris and scrap that are disposed during work at the Facility each day or at such other times as may be designated by GAC. Workers shall clean up and report all oil, other fuel and chemical spills or leaks in accordance with applicable laws and regulations. If GAC's spill and leak containment equipment is used, such use shall be promptly reported to GAC.
- 16. Where guards, floor plates, handrails or manhole plates have been removed, they must be replaced.
- 17. Proper shoring and bracing equipment shall be used when digging trenches.

When digging trenches and other excavations, workers shall review the underground drawings, and use detection to locate underground objects, buried red concrete, regular concrete, electrical power lines, piping, etc.

When workers create excavations that are 4 feet and deeper, they shall brace, shore, or slope the sides to prevent a cave-in. Excavation of less than 4 feet shall require bracing, shoring, etc. when there is a chance of accident or injury due to a cave-in.

Workers shall cover or barricade trenches or other excavations before leaving the job. When work is left uncovered at night, workers shall post Occupation, Safety and Health Administration ("OSHA") approved warnings that are visible in the darkness. Workers shall remove barricades, signs, etc., at the end of the job.

18. Within existing operating and working areas, hazardous areas, including excavations, other openings and areas under any suspended load must be roped off and danger signs posted and special barricades provided, if necessary.

Worker who are working above other workers shall make sure the other worker is away of their presence. For example, when a worker is working above a roadway, walkway, or other location where workers or passersby might be endangered, he or she shall fix suitable warning signs and rope off the danger area.

- 19. Workers performing at a hazardous elevation shall wear a safety belt with a lifeline attached to a solid support.
- 20. Workers shall inspect ladders before use and use only ladders that are in safe condition and are equipped with the proper type shoes or spurs for the ground conditions. Workers shall remove unsafe ladders formwork area and have them repaired or destroyed. Workers shall not use the owner's ladders under any circumstances.

Workers shall properly construct and locate all scaffolds so they will not obstruct passageways, exits, fire fighting equipment, or operating controls. Before using scaffolding, workers shall always check the scaffold to determine whether it has all structural parts in place including handrails, midrails, and toe boards.

Workers shall not use makeshift scaffolds or supports such as drums, boxes, chains, etc. as working platforms. Scaffolds must have planking which is in good condition so that it will not fall under working loads. Workers must comply with specific scaffolding load limits. Before a worker uses a scaffold. He or she shall determine that each scaffold plank (wood or metal) is secured so that it cannot slip off or slide along the supporting member.

21. Workers shall inspect hoisting equipment to be sure that it is in safe operating condition before using it. Workers shall

check for broken wire strands, frayed fiber rope, stretched chain links and bent hoist hooks. Damages equipment shall be tagged for repair. Workers who direct or operate lifting equipment must know and use standard hand signals. One person shall be designated to the hoist or crane operator. No one else in the crew except this person should give signals to the operator and the operator should respond only to those signals given by that designated person.

Workers shall keep clear of suspended moving loads and shall warn others who come within danger. When using a hoist, a worker shall rope off the operating area and post danger signs. A worker must never lift over people or operating equipment.

22. Compressed gas cylinders must be sorted, handled, and used properly. This includes, but is not limited to, the proper securing and guarding of the cylinders at all times and the maintenance on protective caps on such cylinders when they are not in use.

Workers shall handle glass cylinders, such as those for oxygen, acetylene, carbon dioxide, etc., with care so that pressure will not be released suddenly. Workers shall not abuse or misuse cylinders by dropping, banging together, striking, etc.

Workers shall always secure cylinders (preferably upright) to a suitable support with a chain or other safety bracket. Workers shall never lay an acetylene cylinder on its side. Other cylinders may be laid on their sides if they are secured from moving.

Workers shall keep protective caps on cylinders except when they are having piping or control valves attached to the cylinder outlet. Workers shall remove such connections and install protective caps on cylinders when they are transported.

Workers always check label or the stencil on a cylinder to determine whether the cylinder contains the proper gas.

Workers shall never use fittings to connect a cylinder to a regulator.

Workers shall never allow oxygen to contact oil and grease. Oxygen must be stored at least 20 feet away from any combustible gas or be separated by a firewall with a ½ hour fire rating. Workers shall not store oxygen and acetylene together.

Workers shall never cut or weld directly above oxygen and acetylene equipment. The hot metal may damage hoses and start a fire.

When cylinders are left unattended with the hose and torch connected, workers shall always close the cylinder valves and release the pressure in the hoses.

Workers shall ensure that a check valve is installed to prevent oxygen and acetylene from mixing in the hoses.

- 23. Workers shall not use compressed air to blow dust from clothing. It might cause small sharp particles of rust to be embedded in the skin or eyes. Such air might enter an open wound and enter the blood stream causing serious injury or death. Horseplay with compressed air is dangerous and prohibited.
- Workers shall report all fires to GAC immediately, stating location of fire and name of caller. If the owner's or GAC's fire-fighting equipment is used, such use shall be promptly reported to GAC.
- 25. The Subcontractor shall provide workers with protective equipment that is required to perform the specific job.

Examples of projective equipment include, but are not limited to: rubber, heat resistant and other types of gloves; respirators; boots; auto safety belts; protective hoods; foot guards; disposable coveralls; hearing protection; skin protection creams.

26. Workers shall wear approved safety glasses at all times as minimum eye protection.

Additional eye protection, plus a cover-all goggles and face shields are required for work especially hazardous to eyes, such as:

- a. Operating grinding wheels, even when fixed guards are provided.
- b. Chipping, cutting, shearing, drilling or hammering metal and other material where chips might fly.
- c. Using jackhammers, picks, chipping bars, or sledgehammers.
- d. Operating impact welders, sandblasting.
- e. Cleaning machinery or equipment with steam, water, or compressed air.
- f. Working with or near equipment containing caustic acid and other corrosive materials.
- g. Scraping, chipping and brushing scales, rust, and other deposits from surfaces.
- h. Working on equipment known or suspected of being under pressure, such as adjusting, opening vents and drains, drawing samples from connections, and loosening flanges.
- i. Lighting furnaces and opening plates for inspection of furnaces and other operating equipment.
- j. Pouring or handling molten material (metals, asphalt, and other hot materials) in open containers.
- k. Welding and burning operations.
- 1. Working in an area where dust, rust, and other foreign materials are airborne.
- 27. Subcontractors shall ensure that workers properly use respiratory protection. A specific type of respiratory protection may be required for each contaminant and air condition in the Facility. Facial hair may affect the seal of the mask required for respiratory protection. Workers using respiratory protection are cautioned not to have beards or long thick sideburns.

Examples of working conditions requiring respiratory protection include, but are not limited to:

- a. spray painting
- b. handling dry chemicals or other materials that produce dust in harmful concentrations.
- c. Handling insulation containing asbestos (or suspected of containing asbestos).
- d. Entering or working in atmospheres containing concentration of hydrocarbons or benzene above exposure limits
- e. Sandblasting operations. A supplied air hood specifically designed for this work must be worn.
- f. Welding in confined spaces where there is not sufficient ventilation to remove fumes.
- g. Entering or working in an unventilated location known or suspected of having a deficiency of oxygen (less than 20%) in the breathing air.
- 28. The Subcontractor shall provide a hazard communication program adequate to address the work conditions and train workers regarding hazardous materials. Before a project begins, the Subcontractor will review with the workers all chemicals and fuels that workers may encounter at the Facility.

Upon bringing any hazardous material or chemical in or on to the facility, the Subcontractor shall immediately present to the Site Superintendent or other designated representative of the Contractor the appropriate MSDS sheets to be incorporated into the Hazard Communication Book in the job site trailer.

The use of any hazardous chemical or material must be approved by the Contractor prior to the Subcontractor opening any containers and dispensing or using any of such materials. The Subcontractor will be responsible for proper

labeling of any hazardous material or chemicals transferred from their original container to another container for temporary use.

If a worker requires training as outlined in the OSHA standard for hazardous waste operations emergency response, the Subcontractor shall provide appropriate training to the worker.

The Subcontractor shall document all training and MSDS reviews, and provide this documentation to GAC upon request

- 29. Workers shall wear clothing over body, including arms and legs, while performing work at the Facility.
 - a. Workers shall not wear loose, ragged clothing, or neckties near moving or rotating machines.
 - b. If clothing becomes saturated with oil, chemicals, or paint, workers must immediately change to clean clothes. Clothing soaked with these materials presents a fire hazard and continued contact with these materials may cause skin irritations. Consult the applicable MSDS for first aid attention and decontamination instructions.
 - c. Workers shall wear long pants and long sleeve shirts unless otherwise authorized by GAC or unless local safety rules permit other work clothing
 - d. Workers shall wear gloves at the Facility.
- 30. Subcontractors shall be responsible for the worker conduct and for the enforcement of these Safety Rules and Regulations as to all workers who work at the Facility
- 31. Subcontractors shall ensure that tank repair and removal is in accordance to API and OSHA standards. This includes, but is not limited to, the proper procedures to purge and test a tank.
- 32. Subcontractors shall ensure that the workers only use tools that are in good condition, and that the workers do not use files without handles or tools with mushroomed heads, burrs, or cracks, or weakened or broken handles.
- 33. Subcontractor shall ensure that the workers use the proper tool for the work involved, and that the sharp-edges or pointed tools remain sharp for safe efficient work and are carried in specially designed holsters. The primary responsibility for the safe use of hand tools rests with the user.
- 34. Whenever electric power or gas lines are located where they could be contacted by workers in the course of work, the Subcontractor must ensure that one of the following precautions, listed in order of preference, exists before the work starts:
 - a. The power or gas is cut from the line (Lock-out switches, tag, etc.).
 - b. Physical protection is provided to prevent worker contact with power and gas lines. No boom should be located within 10 feet for an overhead electric power line.
- 35. Workers shall not touch or lean against any part of lifting equipment in operation in the vicinity of overhead power lines.
- 36. The Contractor's Site Superintendent will schedule regular safety meetings based on the scope and nature of the work in order to ensure safe working conditions during all phases of the project. Attendance at these meetings is mandatory and each Subcontractor will ensure that its foreman, crew leaders, or other persons who should attend will be at these meetings when announced.

GREAT ARROW CONSTRUCTION

Safety Rules for Subcontractors and Subcontractor Personnel

Acknowledgement:

I have received and read the Great Arrow Construction Safety Rules for Subcontractors and Subcontractor Personnel (7 Pages). I acknowledge that all employees, agents, and subcontractors who perform work at the facility on behalf of the company or individual named below will also receive and read these rules prior to working at the facility.

I understand that violation of these safety rules as well as any rules and regulation published by OSHA, EPA or any federal, state, or local agency or posted by the Facility owner may warrant expulsion from the Facility. I also understand that safety violations or poor safety performance may be a reason to suspend or terminate the subcontracted services.

Company Name	
Address	
Phone No	_
Signed(MUST BE OWNER, PARTNER, OFFICER OR MEMBER)	_
Name	_
Date	