



Contractor/Service Provider Safety Manual

Originally Published: January 2013

Revised: January 2016

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Overview

The information contained in these pages is solely for informational purposes, is in summary form only, and is subject to change. To the best of our knowledge, the information contained on these pages is true and accurate at the time of publication. You are required to read the entire document and urged to consult the Quad project coordinator for clarification or with any questions.

Contractors/Service Providers whose employees, subcontractors, and/or agents (hereinafter "Workers") work on Quad, Inc. and its affiliates (hereinafter "Quad") premises will be required to abide by all the provisions of this Manual, all local, state federal and OSHA rules and regulations. Those Contractors/Service Providers will be required to insure that necessary training and instruction are conducted so that their Workers are familiar with the terms of these safety considerations and understand they are to abide thereby.

On the first assigned day of work on Quad's premises, Quad's project coordinator or designate will conduct a safety orientation with each Worker using Quad's Outside Contractor Safety Orientation form.

In addition, all Workers working on Quad's premises are required to:

- report to Quad hazardous conditions that might exist on site, and
- communicate any hazardous conditions to their Workers, and
- identify to Quad who it is that creates or controls any existing hazard.

The Contractor/Service Provider is required to correct those hazards within their control and to indemnify Quad for any damages Quad or its employees or workers suffer as a result of the Contractor/Service Provider's actions or failure to act to meet the requirements set forth in this Manual or under the law.

When Workers work on Quad's premises, or Workers work with Quad's workers on non-Quad premises, Quad will exchange necessary safety information with those Workers and communicate such information that is additional to that provided in this Manual as appropriate.

Failure to comply with any provisions of this Manual may subject the Workers to immediate loss of equipment use privileges, removal from Quad property, termination of contract, or other sanctions.

Nothing in this Manual is intended to contradict or supersede any term, condition, recital or provision set forth in the Prime Contractor Agreement, Long-Term Service Agreement, or other contract or agreement. Should any provision appear to conflict, contact Quad/Legal immediately.

Safety Organization, Responsibilities & Enforcement

SAFETY FIRST & LAST

The safety of every Worker and the general public shall receive first consideration in the performance of our work. Accident loss prevention must be made a part of everyday operations. Safety is necessary as an integral part of every job. No task shall be considered properly performed unless safety was the first and last concern.

SAFETY ORGANIZATION

Quad is vitally concerned with the welfare of all Workers, their families and the public. In order to safeguard Workers, Quad has established a comprehensive safety program. Management recognizes that safe working conditions for every Worker can be attained through the use of safety equipment, proper job instruction, frequent reviews of safe practices, adequate supervision, and a proper attitude on the part of the Worker. The management of Quad supports the intent of this safety program and supports its enforcement.

INDIVIDUAL RESPONSIBILITIES

It is the responsibility of each Worker to accept safety as a personal matter and to cooperate in the safety program by developing and maintaining safe, economical work habits, and by reporting hazardous working conditions.

The rules in this Manual are mandatory and are to be considered minimum standards. Workers who knowingly violate any provision herein may be subject to review by hiring contractor and could result in the job being shut down or terminated.

ENFORCEMENT

Violations of established safety procedures or safety rules included in this Manual could result in loss of equipment use privileges, removal from assignment at Quad, and/or termination of contract.

CONDITIONS NOT COVERED

Although Workers are primarily responsible for their own safety, where conditions are not covered by this Manual or where the rule, practice, or regulations are not completely understood by them, specific instructions shall be obtained from Quad's project coordinator or safety leader before proceeding with the work.

General Safety Guidelines

QUAD SAFETY POLICIES

1. Employees must immediately report any work-related illness or injury to their supervisor.
2. Employees must immediately report any damage to company property or product to their supervisor.
3. Fighting or horseplay is prohibited.
4. Possession of firearms or any other weapons is prohibited.
5. Only approved knives and cutting tools are allowed on the premises.
6. All tools and equipment shall be inspected prior to use; unsafe tools and equipment shall not be used.
7. Possession of or use of alcohol or being under the influence of alcohol while working or on company premises is strictly prohibited (excluding at authorized company events). Possession or use of illegal or unauthorized drugs, or being under the influence of illegal or unauthorized drugs, while working or on company premises is also strictly prohibited.
8. All pedestrians must use designated walkways and mezzanines when traveling through production areas.
9. Climbing through, over, under or between rail cars is prohibited.
10. All walkways, work platforms, aisles, exits, firefighting equipment, alarm boxes, electric lighting or power panels shall be kept clear at all times. Work areas shall be kept neat and clean.
11. Compressed air is only to be used with an air gun that meets or exceeds OSHA standards. Using compressed air as a fan or as a means to blow off dust or debris from one's body or clothing is prohibited.
12. Only authorized electricians are allowed to enter/access electrical panels.
13. All guards and safety devices must be in place prior to operating equipment. Employees must report missing or faulty safety devices and guards to their supervisor immediately.
14. Approved stop/safe or lockout procedures must be followed before placing any body part into the point of operation.
15. Employees shall be seated in all moving vehicles and seat belts properly used if provided.
16. Employees shall be properly trained and authorized prior to operating equipment.
17. Employees shall only perform work within the scope of their training.
18. Employees shall perform work in such a manner as to ensure maximum safety at all times to themselves, their fellow workers and the public, and in accordance with federal, state and local requirements.
19. Employees shall perform work in accordance with proper corporate and department-specific Employee Health and Safety practices and procedures as posted, instructed and prescribed.
20. Employees must observe and adhere to all signs, signals and notices.
21. Employees may not wear loose, ragged or torn clothing on the production floor (including hooded clothing). Shirts shall be tucked in or have elastic around the bottom that can be tucked under to fit tight around the body.
22. Jewelry — e.g., rings, bracelets, chains, watches, necklaces and earrings other than studs (including exposed body piercings) — may not be worn while working in production areas. However, medical identification jewelry and wedding bands may be worn ONLY if taped in place or with approved finger/ring wraps.
23. As of January 1, 2008, ANSI Z87.1 approved safety glasses are required for all employees, visitors, vendors, contractors and guests at all times in all production areas, including pedestrian walkways and aisles.

24. All hair hanging past the bottom of an employee's collar must be secured to the head while in our production areas. If hair does not hang past the collar but could potentially get caught in our equipment, it must be secured to the head with a hairnet or by other means. Ponytails are strictly prohibited. Facial hair longer than 1 inch below chin must be secured.
25. Approved Personal Protective Equipment (PPE) such as steel-toed shoes, face shields, protective clothing, gloves, hard hats, hearing protection, fall protection, etc., shall be used by all employees where the risk of injury or illness has been identified and may be prevented by its use. Open-toed and open-heeled shoes are strictly prohibited in all production areas. –If you are unsure what personal protection equipment is required for a job or task, ask your supervisor or plant safety leader.

DRUGS / ALCOHOL / MEDICATION

Use of alcohol or other drugs, other than those lawfully prescribed by a treating physician, during work hours, including rest breaks and lunch periods, is strictly prohibited.

Workers are prohibited from engaging in any illegal drug activity or from working at any Quad site with alcohol or illegal or improperly used drugs in their systems. Workers may bring prescription drugs to the workplace for use only in accordance with a lawful prescription and in accordance with this and any other Quad policy. Any Worker taking a prescribed medication that may impair his ability to safely perform his job duties must report such risk of impairment to his supervisor. It is the Worker's responsibility to consult with his doctor to determine the effect, if any, the prescribed medication may have on his ability to safely perform his duties.

Prescribed lawful pharmaceuticals may be brought to the job site subject to the following limitations:

- Any medication brought on the premises must be in the original pharmaceutical container and must be taken only by the person to whom it is prescribed, in the manner directed by the prescribing physician.
- Workers performing safety-sensitive functions may not use impairing medication and will not be permitted to use any medication containing alcohol during work time.

Any Worker reporting for work in an intoxicated or impaired state, be it from alcohol, prescribed drugs or illicit drugs, will be considered unfit for duty, sent home, and reported to the Contractor/Service Provider's management.

SMOKING

Quad is a tobacco-free workplace. There is no smoking or chewing of tobacco on Quad premises—inside the facility, curb-to-curb, and street-to-street.

HOUSEKEEPING

In business, "housekeeping" means more than the word implies elsewhere. It is a way of working. It means keeping equipment clean and in proper place, disposing of waste in proper containers, storing materials, equipment and tools in an orderly manner in designated places only.

By practicing good housekeeping, you are contributing to the overall safety awareness program. The kind of housekeeping we must have cannot be accomplished by periodic clean-ups. Like safety, the maintenance of good housekeeping habits is each Worker's personal daily responsibility.

Security

REQUIREMENTS

Quad is committed to providing a safe and secure work environment for all individuals, while protecting company and customer assets.

Workers shall comply with all established security controls and procedures for the safeguarding of classified information as well as identification and control of material, property, equipment, and personnel. Quad requires full cooperation and compliance with all security rules and regulations. Workers who do not conform to Quad's security rules and regulations shall not be permitted at Quad.

ABUSE / UNAUTHORIZED REMOVAL OR THEFT OF PROPERTY

Abuse, unauthorized removal or theft of any Quad property, is strictly prohibited and, if suspected, should be immediately reported to Quad's project coordinator and to your supervisor.

In addition, all personal parcels, tool boxes, lunch boxes, and other belongings are subject to search by Quad. Theft, suspicion of theft, or failure to comply with a search request will result in that Worker's removal from Quad property immediately and may subject the Contractor/Service Provider's contract to termination, or at Quad's discretion, that Worker will no longer be permitted on any Quad property at any time. In an effort to increase security, some facilities have installed video surveillance in public areas. Accordingly, no Worker should have any expectations of privacy in public areas.

Quad will not tolerate any threats or acts of violence including, but not limited to: physical assault; aggressive behavior (either physical or verbal); intentional destruction of Quad's, employee's, customer's, or another person's property; or intimidation through verbalized or implied threats. Any reported act or threat will be investigated as a serious violation of Quad's Company Policy and, if confirmed, be grounds for removal from the assignment at Quad and/or termination of the contract. If deemed appropriate, law enforcement officials will be contacted.

UNIFORM POLICY

All Workers are required to wear a standard uniform that includes their company's name with Worker's name that is visible at all times; or wear a Worker identification tag along with a Quad visitor badge. While casual wear is acceptable, a professional appearance is required for Workers. Inappropriate logos, phrases, or pictures on clothing will not be permitted. Any Worker wearing unauthorized attire will be requested to cover up the inappropriate clothing or will be directed to leave Quad property.

CHECK IN / CHECK OUT PROCEDURE

Workers will report to the receptionist and sign the registry. Worker will be given a visitor badge at that time to be worn during the entire stay. Worker will either wait for a Quad contact to greet him or if he has prior knowledge of facility and authorization to do so, may report to the service area. Once at the site of the service area, Worker will report to Quad's project coordinator or other delegate appointed by Quad's project coordinator.

Worker will report all departures from Quad's facility to Quad's project coordinator and will sign out in the registry in the reception area, regardless of whether the worker is departing for a lunch break, parts pickup, or leaving at the end of the work shift. Upon return to Quad's facility,

the worker will report to the receptionist and sign the registry.

The Contractor/Service Provider shall be responsible to review this policy with their Workers prior to their assignment at Quad to ensure compliance with Quad's security rules and regulations.

Emergency Procedures

INTRODUCTION

Quad's safety orientation provided to workers includes coverage of emergency procedures. Quad's project coordinator or safety leader can provide additional information to workers at Contractor/Service Provider's request.

EMERGENCY NOTIFICATION

The following code system is used to convey the type of emergency occurring and alert the appropriate emergency response personnel/teams.

CODE BLUE: Medical emergency or injury

CODE RED: Fire

CODE YELLOW: Chemical spill

CODE SECURITY: Verbal or physical confrontation or threats

SEVER WEATHER WARNING: Seek shelter immediately

Check with Quad's project coordinator or safety leader for the site-specific means used to alert the appropriate plant emergency response team(s).

CALLING AN AMBULANCE / CALLING THE FIRE DEPARTMENT

Check with Quad's project coordinator or safety leader for the appropriate phone number and dialing instructions used to access the local emergency response unit.

Provide your name and location to the dispatcher. Identify the area that emergency vehicles and personnel should respond to. Give the dispatcher as much information as you can regarding the type of injury or fire. Be as specific as possible. You hang up last.

Always have someone waiting outside the plant to direct the ambulance or fire personnel to the injured person or fire.

CODE RED / FIRE

When notified, trained emergency personnel will respond immediately to give assistance. Individuals who are not trained to handle these emergencies **MUST STAY OUT OF THE WAY!**

If you know how to use a fire extinguisher, and the fire can be contained with an extinguisher, you can try to put the fire out. If you need more than 2 fire extinguishers to put the fire out, if the fire appears large, or if the fire has the potential to quickly get out of hand, call the fire department. Station someone outside of the plant to direct the ambulance or fire personnel to the fire.

FIRE PROTECTION

Know the location of all fire exits, fire extinguishers, and alarm boxes in your work area.

Fire extinguishers are available throughout the facility. See your supervisor for training before using a fire extinguisher. NEVER use water for electrical or flammable liquid fires. NEVER place an extinguisher that has been used back in the rack; it must be serviced after use. ALWAYS notify Quad's safety department or Quad management when you have used an extinguisher.

Fire doors must be accessible at all times. Place materials, trucks, skids, racks, crates, boxes, ladders and other equipment so they do not block aisles, exits, firefighting equipment, alarm boxes, and electrical lighting or power panels.

CODE BLUE / INJURY

When notified, trained emergency personnel will respond immediately to give assistance. Individuals that are not trained to handle these emergencies **MUST STAY OUT OF THE WAY!**

If the injury or illness appears serious, after announcing a **CODE BLUE**, call for an ambulance. Station someone outside of the plant to direct the emergency vehicles and personnel to the injured person.

REPORTING ILLNESS / INJURY

Immediately report any work-related illness or injury, no matter how slight, to Quad's project coordinator and to your supervisor. Refer to your employer's injury treatment procedures. You are required to comply with any work restrictions imposed by your physician following any personal or work-related accident, injury, or illness.

In the event you become ill or incur a work-related injury, Quad's Emergency Responders may provide emergency assistance. A copy of your accident report should be given to Quad management. Care by Emergency Responders is provided solely as Good Samaritan care and Quad assumes no liability for such care or any continuing or additional care.

UNIVERSAL PRECAUTIONS

Workers are to avoid direct contact with blood and other body fluids. If you need to help a bleeding or injured person, you must in all circumstances wear disposable gloves. Gloves are available in all first aid kits and in Quad's Safety office.

Following contact with blood or body fluids, wash your hands immediately with soap and water, even if you had gloves on. If a splash should occur to your face, flush your face and eyes with water.

Contact your employer and Quad's project coordinator as soon as possible if you have an exposure.

CODE YELLOW / CHEMICAL SPILL

When notified, trained emergency personnel will respond immediately to give assistance. Individuals who are not trained to handle these emergencies **MUST STAY OUT OF THE WAY!**

SEVERE WEATHER ALERTS

Quad has developed guidelines for evaluating severe weather conditions and alerting Workers. Each facility has employees dedicated to monitoring weather conditions when necessary. An announcement will be issued by the individuals to "Seek shelter immediately" when severe weather dictates.

You are to:

1. Immediately shut down your equipment, if time permits.
2. Immediately proceed in an orderly, calm manner, with your work group, to the nearest Severe Weather/Tornado Shelter.
3. Remain in the Severe Weather/Tornado Shelter until an "All clear" is announced.

Maps of the plant are located in each department and general areas of the plant. Take time now to review these maps for locations of Severe Weather/Tornado Shelters.

CODE EVACUATION

If a plant evacuation becomes necessary, an announcement will be issued. Follow the direction of Quad's project coordinator to determine the most appropriate outside meeting location in the event of an evacuation.

You are to:

1. Immediately shut down your equipment, if time permits.
2. Immediately proceed in an orderly, calm manner, with your work group, to the nearest emergency exit.
3. Report to your work area's designated outside meeting spot so that headcounts can be taken.
4. Remain at your designated meeting spot until further instructions are given.

CODE SECURITY

When notified, trained members of the Security staff will respond, assess the situation and verbally diffuse any verbal or physical confrontation before it escalates.

Right to Know

MATERIAL SAFETY DATA SHEETS

Contractors/Service Providers must provide Quad with Safety Data Sheets for any and all chemicals and applicable products their Workers bring on Quad premises. The Safety Data Sheets must be available and immediately accessible for review at all times, for the duration these products are on Quad property.

Safety Data Sheets for chemicals and applicable products supplied by Quad for use by Workers will also be available for review.

PRODUCT LABELING

All Workers are required to ensure that each container of hazardous chemicals on Quad property is labeled, tagged or marked to:

1. Identify the hazardous chemical it contains, and
2. Identify any hazard warning associated with its contents.

Existing labels on incoming containers must not be defaced, unless the required information is immediately replaced.

DISPOSAL

Chemicals and applicable products supplied by the Contractor/Service Provider for use by their Workers shall be disposed of by the Contractor/Service Provider according to Safety Data

Sheet information and all applicable regulations.

Personal Protective Equipment (PPE)

OVERVIEW

The purpose of the PPE program is to ensure that all Workers follow uniform procedures and are adequately protected from workplace hazards when both engineering and administrative controls are not feasible. PPE includes, but may not be limited to, respiratory protection, hearing protection, eye protection, safety shoes, and gloves.

RESPIRATORY PROTECTION

Quad's respiratory protection program has been established to coordinate the use and maintenance of respiratory protection equipment that is used to reduce Worker's exposure to air contaminants. In addition, it will allow Workers to work safely in potentially hazardous environments.

These guidelines are designed to help reduce Worker's exposures to occupational dusts, fumes, mists, radionuclides, gases and vapors. The primary objective is to prevent excessive exposure to these contaminants. Where feasible, exposure to contaminants will be eliminated by engineering controls (i.e. general and local ventilation exposure or isolation, and substitution of a less hazardous process or material). When effective engineering controls are not feasible, use of personal respiratory protective equipment may be required to achieve this goal.

All Workers must be in compliance with OSHA requirements and Quad's policies.

EYE PROTECTION

ANSI Z-87.1 approved eye protection is required for all Workers in all construction areas, and whenever Workers perform tasks that can cause eye injuries, including, but not limited to, grinding; using abrasive saws, air nailers, and power actuated tools; working overhead, working with chemicals, and operating fork trucks, carts, bicycles, and lifts.

HEARING PROTECTION

Hearing protection is mandatory for Workers in all production areas, all construction areas, and other areas designated by Quad's project coordinator.

FOOT PROTECTION

ANSI Z-41 safety shoes are required for all Workers when working in areas where there is danger of injury due to falling or rolling objects, or objects piercing the sole, and where such Worker's feet are exposed to electrical hazards. Open-toed or open-heeled shoes are never permitted in production areas or other areas designated by Quad's project coordinator.

MACHINE GUARDING

All guarding must comply with applicable OSHA requirements. Do not operate machinery unless all guards are in place and operating. If a guard is not in proper condition, immediately report this to Quad's project coordinator.

Guards shall never be removed except when it is necessary to make adjustments or repairs. Guards must be replaced immediately upon completion of the work requiring their removal.

Material Handling

POWERED INDUSTRIAL TRUCKS

All equipment brought on site for use by Workers must be approved for use by Quad.

Quad requires proof of successful completion of fork truck/lift training within the past 36 months for all Workers who may, in the course of their duties, need to operate a fork truck/lift. The training shall comply with OSHA requirements. If the Worker does not have proof of current training, they will NOT be allowed to operate a fork truck/lift.

All operators are required to make a daily inspection of the equipment. When using Quad's equipment, the operator is required to file an Internal Combustion Daily Check List with Quad's project coordinator. The operator should request the form when the vehicle is assigned to him/her.

Repairs to Quad equipment should only be made by a Quad maintenance

technician. All Workers operating fork trucks must follow these guidelines:

- Never tamper with, or modify, the equipment components or controls to alter its performance. Only a qualified fork truck mechanic should service and maintain this equipment.
- Only the fork truck operator is allowed on the vehicle.
- Use prudent speed.
- Watch for pedestrians and other traffic.
- Slow down and use your horn at all intersections.
- Get assistance from a Quad fork truck operator if you need to change the propane cylinder.
- Remove the fork truck from service if any mechanical or electrical problems occur.
- All accidents or collisions, including those involving property damage and/or pedestrian injury, must be immediately reported to Quad's project coordinator or safety leader, and to your direct supervisor.
- Never operate any machine equipment belonging to Quad unless you have permission from Quad management.
- Safety glasses are required when driving powered industrial trucks.
- Seat belts are required.

CARTS, BICYCLES, AND SCOOTERS

All equipment brought on site for use by Workers must be approved for use by Quad. Only 3-wheel bicycles will be approved for use by Quad.

All Workers using carts and bicycles must follow these guidelines:

- Vehicles must be maintained and kept in good working condition.
- If brakes are not working or any other dangerous conditions are found, the cart or bicycle should be taken out of service immediately, and if Quad equipment, tagged with the problem and reported to Quad Fleet Maintenance.
- Horns must be in good working order.
- Watch for pedestrians and other traffic.
- Drive at reasonable speeds for the conditions.
- Reduce speed in obstructed areas and around corners.

- Headlights must be turned on at all times.
- Slow down and use your horn at all intersections.
- There must be a seat for every person riding. There should be no one standing on the cart.
- Safety glasses must be worn at all times by driver and passenger on a cart or bicycle.
- No horseplay.
- When towing welders, toolboxes, etc. behind a cart, the item must be hitched and/or secured.
- All accidents or collisions, including those involving property damage and/or pedestrian injury, must be immediately reported to Quad's project coordinator or safety leader, and to your direct supervisor.

CRANES

All cranes and lifting equipment must be properly inspected and operated by qualified personnel only.

AERIAL LIFTS

All equipment brought on site for use by Workers must be approved for use by Quad.

Quad requires proof of successful completion of aerial lift training for all Workers who may, in the course of their duties, need to operate an aerial lift. The training shall comply with OSHA requirements. If the Worker does not have proof of current training, they will NOT be allowed to operate an aerial lift.

All operators are required to make a daily inspection of the equipment. When using Quad's equipment, the operator is required to file a pre-use inspection sheet located on each machine and give it to Quad's project coordinator or safety leader.

All Workers operating aerial lifts must follow these guidelines:

- Never tamper with, or modify, the equipment components or controls to alter its performance.
Only a qualified fork truck mechanic should service and maintain this equipment.
- Hard hats and eye protection are required at all times.
- A full body harness with a restraint secured to an anchor point is required when operating a boom lift.
- Work must be done from the platform only. No one can sit or climb to the edge, use the side rail, ladders, planks or other devices that could be used to increase the working height of the lift.
- Conduct a job site safety inspection prior to beginning work (check for debris on the floor, slippery areas, uneven surfaces, etc.).
- Use prudent speed.
- Watch for pedestrians and other traffic.
- If possible, section off the area to avoid fork trucks, motorized carts or pedestrians from entering the work area.
- Slow down and use your horn at all intersections.
- Remove the aerial lift from service if any mechanical or electrical problems occur.
- All accidents or collisions, including those involving property damage and/or pedestrian injury, must be immediately reported to Quad's project coordinator or safety leader, and to your direct supervisor.

Periodic inspections and repairs are to be performed by a competent person. Repairs to Quad equipment should only be made by a Quad maintenance technician.

BATTERY STORAGE & HANDLING

No smoking or open flames will be permitted in the vicinity of charging storage batteries. Insulated tools shall be used when working on batteries as an electrical spark could trigger an explosion of the hydrogen-oxygen gas mixture being released by the batteries.

All Workers shall use gloves, aprons, safety glasses, goggles and face shields whenever handling acids and caustics. These safety articles must be used to prevent personal injury from chemical burns. An eyewash station is readily available for use in the event a Worker accidentally splashes electrolyte in his or her eyes.

Construction

HARD HATS & SAFETY GLASSES

Quad requires appropriate hard hats (ANSI Z89.1, 1997, Class E, Type 1) and safety glasses (ANSI Z87.1) in all construction areas.

FALL PROTECTION

1. Workers in fall hazard areas such as unguarded work decks, roofs, aerial lifts, and ladder jack scaffolds measuring 4 feet or higher in general areas and 6 feet or higher in construction areas must have fall protection.
2. Holes larger than two inches must be identified as "HOLE" and covers must be fastened down.
3. Workers who remove protections such as guardrails and hole covers must protect the hazard while the protection is removed and must replace the protection as soon as their work is completed.
4. All ladders must be in good condition, used according to manufacturer's specifications, and be secured when used for access.

STEEL ERECTION

All Workers shall comply with OSHA CFR 1926, Subpart R.

SCAFFOLDS

Contractors/Service Providers who build scaffolds must supply a competent person to oversee scaffold erection and must be sure that the scaffold is in complete compliance with OSHA requirements before anyone is allowed to work on the scaffold. All work decks must be fully planked and properly guarded.

EXCAVATIONS

"Excavation" means any operation in which earth, rock, or other material in or on the ground is moved, removed, or otherwise displaced by means of any tools, equipment, or explosives and includes grading, trenching, digging, drilling, auguring, tunneling, scraping, cable or pipe plowing, and driving and means any operation by which a structure or mass of materials is wrecked, razed, rendered, moved or removed, inside or outside a Quad facility.

All excavation work must be planned in advance giving consideration to soil conditions,

interference with traffic or nearby activities, piling or disposal of spoils, delivery and storage of material and equipment, probable weather conditions, and the possible need for shoring and cribbing.

Contractor/Service Provider must provide a competent person to assure that excavations are properly protected from cave-ins. Written documentation of training must be provided to Quad's project coordinator.

Prior to excavation, permissions and permits are to be obtained, and underground utility locations are to be determined and identified (through Diggers Hotline) to Workers and to Quad's project coordinator. A Quad Pre-project Utility Locations Form must be completed and turned in to Quad's project coordinator prior to any work being performed.

When excavating, all necessary precautions must be taken to prevent cave-ins. The sides of the excavations shall be "trimmed" to prevent paving or stones from projecting over or dropping into the excavation. Evacuated material and loads shall be kept away from the edge of the hole, using toe boards, if necessary, to prevent cave-in.

Generally, in trenches, steel shields shall be used.

Trench jacks, struts or braces must NEVER be used as ladders.

Where shoring is not practical, cave-ins must be prevented by sloping the walls of the excavation well back from the work area in the bottom of the hole.

BACKFILL

Backfill must be well puddled, tamped, or otherwise adequately settled in accordance with local building codes.

Public Protection & Water Safety

BARRICADES

All excavations, refilled soft trenches, open manholes, and job sites next to roads shall be protected by adequate barricades during daylight hours, with the addition of adequate lighting, in the form of flashers, to identify the hazard at night.

WARNING DEVICES

Warning devices shall consist of flashers, flares, barricades, flags, flag persons, barricade tape, cones, warning signs, and proper lighting at night, but are not limited to the aforementioned.

WATER EXPOSURES

Contractor/Service Provider is required to furnish all personal flotation devices, buoys, and skiff, and to comply with all OSHA requirements, when Workers are working over or near water.

Electrical

INTRODUCTION

Tampering with electrical circuit boxes, electrical devices, and/or performing electrical maintenance, installations, and repairs are prohibited by anyone other than an authorized electrician.

TEMPORARY ELECTRIC

1. All temporary electrical installations will be in compliance with OSHA and the National Electrical Code (NEC).
 - a. Electrical installation must have ground fault protection on all temporary electrical circuits.
 - b. Temporary panels must be set to minimize long extension cord runs.
 - c. All panels that have live power must be covered with a hard, non-conductive cover at all times unless the electrician is working directly at the panel.
 - d. All temporary lights must be properly wired on separate branch circuits.
 - e. Lights must be properly caged or protected and be separately supported from the pigtails.
2. All temporary extension cords and electrical equipment brought to the site must be properly inspected and in good condition. Damaged equipment must be removed.

LOCKOUT / TAGOUT

Lockout and tagout procedures shall be used to ensure that machines or equipment are stopped, isolated from all potentially hazardous energy sources and locked out before Workers perform any service or maintenance, where the unexpected energization or startup of the machine or equipment or release of stored energy could cause injury. Lockout and tagout procedures shall comply with OSHA requirements.

Quad requires proof of completion of lockout/tagout training for all workers who may, in the course of their duties, need to perform lockout or tagout procedures. The training shall comply with OSHA requirements. If the Worker does not have proof of training, they will NOT be allowed to perform lockout or tagout procedures.

All workers will be notified by Quad's contact person of the lockout and tagout procedures that are to be used while working at Quad. The workers will supply their lockout and tagout devices.

Do not attempt to operate any valve or other energizing isolating device where it is locked or tagged out. Tampering with a lock or tag is strictly prohibited.

ENERGIZED WORK

Where feasible, Workers shall not perform live electrical work. Electricians and other qualified employees that engage in live work are required to practice applicable safe work procedures and utilize appropriate PPE and equipment. See Quad Electrical Safety Program.

Confined Space Entry

Quad requires proof of completion of confined space training for all Workers who may, in the course of their duties, need to work in a confined space. The training shall comply with OSHA requirements. If the Worker does not have proof of current training, they will NOT be allowed to work in a confined space.

Quad will review with Workers the specific confined space procedures for any space they may be required to enter. Quad's project coordinator or safety leader will discuss rescue procedures with Workers prior to confined space entry.

Confined spaces will be marked in a conspicuous manner at points of entry, with a sign identifying the space.

A confined space entry permit must be completed in coordination with Quad's project coordinator, for ALL confined space entry.

Hot Works

HOT WORKS PERMIT

A Hot Works Permit must be obtained from Quad's project coordinator before proceeding with any temporary operation involving open flames or producing heat and/or sparks. This includes, but is not limited to, brazing, cutting, grinding, soldering, torch applied roofing, or welding. The permit is valid for 24 hours. This permit is voided if any emergency condition arises.

Only a Worker trained in the use of welding equipment shall operate such equipment unless under the direct supervision of a competent welder.

All welding equipment shall be inspected frequently and maintained in accordance with manufacturer's instructions.

WELDING PERSONAL PROTECTIVE EQUIPMENT (PPE)

Welders and helpers are to wear gloves with gauntlets. High top shoes are recommended. Dark goggles and welder's helmets are to be worn by both welders and helpers when welding and cutting operations take place.

When cutting, welders and helpers are to position themselves in a way that will reduce the possibility of injury from sparks. The welders and helpers also need to consider where the cut pieces will fall in order to avoid injury to the legs and feet from falling pieces.

Welding and cutting zinc, stainless steel, brass, bronze, or any other metals requiring additional ventilation shall be done only in designated areas as determined by Quad's project coordinator.

PROTECTION OF OTHERS

Welders must take special precautions, such as the use of screens or barriers, to protect other Workers and the public from sparks, hot metal, and harmful light rays.

Hot metal should not be left unguarded. This is to prevent those unaware of the potential hazard from coming in contact with the hot metal.

Hoses are to be arranged and stored so as to minimize tripping hazards and possible damage.

FIRE WATCH

A fire watch person shall be posted during welding and cutting operations. The fire watch person will have a suitable fire extinguisher for the materials on hand. A fire watch person shall be trained in fire extinguisher usage and know how to summon help.

The fire watch person will re-check the area for any smoldering or burning debris as required on Quad's Hot Works Permit.

Compressed Gas Cylinders, Air & Explosive Actuated Tools

COMPRESSED GAS CYLINDER HANDLING & STORAGE

Compressed gas cylinders must be handled carefully. They must not be dropped or jarred. Cylinders must be stored in an upright position and secured to protect against falling over. Cylinders must not be lifted by their valve protection caps. They shall be protected from heat, direct sunlight, sparks and flames, and they shall not be stored or transported with hoses attached.

No attempt shall be made to repair a leaky cylinder. Any such cylinder shall be removed to an open area, tagged as leaking, and reported to your direct supervisor or to Quad Fleet Maintenance.

All cylinders shall have their contents identified with proper labels. Compressed gas shall not be used from a cylinder unless an approved automatic pressure regulator is used. Oil and greases must not be used on the cylinder regulator connections. Valves must be opened slowly. When cylinders, empty or full, are not in use, protection caps are to be in place, valves must be closed tightly, and cylinders must be secured in an upright position.

Empty cylinders shall be properly marked (with chalk) as empty (M/T), stored separately, and handled and treated the same as full cylinders.

COMPRESSED AIR TOOLS & EQUIPMENT

Only authorized Workers trained in their use shall use portable air tools. They shall be used for their intended purpose. Workers shall wear proper eye protection when using portable air tools.

Special precautions should be taken for bystanders when using compressed air as a cleaning device that could cause particles and dust to endanger operator and others in the near vicinity. **WORKERS MUST NEVER USE COMPRESSED AIR TO CLEAN OFF THEMSELVES OR OTHERS!** Compressed air must not be used to remove dust from clothing, body or hair. Horseplay with compressed air tools and air lines is particularly dangerous and is strictly forbidden. Pointing a portable air tool or airline at another Worker is strictly forbidden.

EXPLOSIVE ACTUATED TOOLS

Workers operating explosive actuated tools shall wear proper eye protection. Only trained and competent workers are to use explosive actuated tools. High-velocity explosive actuated tools shall be used in accordance with existing manufacturer's rules and regulations. The pointing of an explosive actuated tool at another person is a potentially life-threatening act and is strictly forbidden.

Tools shall be maintained in good condition and serviced regularly by competent persons. The material upon which these tools are to be used shall be examined for their ability to absorb the shock of the explosive used (proper load) without being excessively penetrated or breaking and shattering which could possibly cause serious injury.

Process Safety Management

Quad's CRT gravure ink manufacturing facilities and gravure printing facilities fall under OSHA's Process Safety Management (PSM) Standard, 29 CFR 1910.119. Application is due to the amount of solvent on site at these facilities. All Workers working within the PSM-related departments at these sites must comply with the PSM elements.

Quad is responsible for:

- Informing Workers of known potential fire, explosion, or toxic release hazards related to their work and the process
- Explaining to Workers the emergency action plan
- Developing and implementing safe work practices
- Evaluating the performance of Workers

Contractor/Service Provider is responsible for:

- Ensuring that Workers are trained in the work practices necessary to perform their job safely
- Ensuring that Workers are instructed in the known potential for explosion or toxic release hazards related to their job and the process
- Ensuring that Workers are instructed in the emergency action plan expectations
- Documenting that each Worker received and understood the training required by the OSHA standard by preparing a record that contains the identity of the Worker, the date of training, and the means used to verify that the individual understood the training
- Ensuring that each Worker follows the safety rules of the facility, including the required safe work practices
- Advising Quad of any unique hazards presented by the Contractor/Service Provider's work.