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Policy Statement on Safety

The health and safety of each Cirks Construction Inc. employee is of primary importance to us. As a company, we are committed to maintaining a healthy and safe working environment. Management will provide necessary safeguards, programs, and equipment required to reduce the potential for incidents and injuries.

To achieve this goal, we have developed and implemented a comprehensive Health, Safety, & Environmental Manual (HSE), which incorporates all required components of an Injury and Illness Prevention Program (IIPP). This program is designed to prevent workplace incidents, injuries, and illnesses. A complete copy of the program is maintained at our corporate office and on all job site locations in written or electronic form. You may ask to review it at any time. A copy of relevant portions of the program that are applicable to your job will also be provided to you. You may also contact the company safety director if you have any questions or concerns.

It is the intent of Cirks Construction Inc. to comply with all laws relating to occupational health and safety. To accomplish this, we require the active participation and assistance of all employees. The policies and procedures contained in this manual are mandatory. You should also be constantly aware of conditions in all work areas that can produce injuries or illness. No employee is required to work at a job that he or she knows is unsafe. Never hesitate to inform your supervisor or foreman of any potentially hazardous situation or condition that is beyond your ability or authority to correct immediately. No employee will be discriminated against for reporting safety concerns to management.

It is the responsibility of each employee to support the company safety program and to perform in a manner that assures his or her own personal safety and the safety of others, including customers, visitors, and other trades. To be successful in our endeavor, all employees at every level must adopt proper attitudes towards injury and illness prevention. We must also cooperate in all health and safety matters, not only between management and employees, but also between each employee and his or her respective co-workers. Only through such an effort can any safety program be successful. Our objective is a health and safety program that will reduce the total number of injuries and illnesses to an absolute minimum. Our ultimate goal is zero incidents.

Ken Cirks; President of Cirks Construction Inc.

Stuart Nakutin; Safety Director of Cirks Construction Inc.
Duties and Responsibilities for Safety

A successful Health, Safety, Environmental and Injury and Illness Prevention Program can only be achieved and maintained when there is active interest, participation, and accountability at all levels of the organization. At Cirks Construction Inc., it is a condition of employment that all employees are responsible for safety. To ensure this, Cirks Construction Inc. delegates the following safety duties by job title. Please keep in mind that this is not an all-inclusive list. In some cases, employees will need to perform safety duties outside their regular responsibilities to prevent incidents.

Stuart Nakutin, who can be reached at (714) 400-5023, (referenced forward as the “safety director”) will plan, organize, and administer the program by establishing policy, setting goals and objectives, assigning responsibility, motivating subordinates, and monitoring results. All employees of Cirks Construction Inc. will support and maintain an ongoing Health, Safety, Environmental and Injury and Illness Prevention Program through the following:

1. Provide clear understanding and direction to all management, employees, and sub-contractors regarding the importance of safety through the development, implementation, monitoring, and revision of policies and procedures.

2. Provide financial support for the Injury and Illness Prevention Program through the provision of adequate funds for the purchase of necessary safety materials, safety equipment, proper personal protective equipment, adequate time for employee safety training, and maintenance of tools and equipment.

3. Oversee development, implementation, and maintenance of the IIPP and other required safety programs.

4. Maintain a company commitment to incident prevention by expecting safe conduct on the part of all managers, supervisors, and employees.

5. Hold all levels of management and employees accountable for incident prevention and safety.

6. Review all incident investigations to determine corrective action.

The safety director for Cirks Construction Inc. acts as a safety resource for the company and is responsible for maintaining program records. He is also our primary person to deal with outside agencies regarding the safety program and its contents. Additional duties include:

1. Coordinate all loss prevention activities as a representative of management.

2. Act as a consultant to management in the implementation and administration of the Safety Program.

3. Develop and implement loss prevention policies and procedures designed to insure compliance with the applicable rules and regulations of all federal, state, and local
agencies.

4. Review all incident reports to determine root cause and corrective action.

5. Conduct periodic reviews of the safety program and job sites to evaluate performance, discuss problems, and help solve them.

6. Consult with representatives of our insurance companies in order that their loss control services will support the safety program.

7. Review Workers’ Compensation claims. Help supply the insurance carrier with information about injured employees in order to keep loss reserves to a minimum.

Managers and supervisors play a key role in the prevention of incidents on the job. They have direct contact with the employees and know the safety requirements for various jobs. Safety responsibilities for these individuals include:

1. Enforce all safety rules in the Code of Safe Practices, the posted job site rules, and ensure safe work procedures.

2. Verify corrective action has been taken regarding safety hazards and incident investigations.

3. Conduct periodic documented inspections of the work sites to identify and correct unsafe actions and conditions that could cause incidents.

4. Act as a leader in company safety policy and set a good example by following all safety rules.

5. Become familiar with federal, state, and local safety regulations. The safety director is available for assistance.

6. Under the guidance of the safety director, train all new and existing employees in proper safety procedures and the hazards of the job.

7. Instruct all employees under his or her supervision in safe work practices and job safety requirements.

8. Hold safety meetings with employees.

9. Ensure employee proficiency when assigning work requiring specific knowledge, special operations, or equipment.

10. Ascertain that all machinery, equipment, and workstations are maintained in safe working condition and operate properly.

11. Correct unsafe acts and conditions that could cause incidents.

12. Communicate with all employees about safety and incident prevention activities.
13. Correct the cause of any incident as soon as possible.

14. Ascertain that proper first aid and firefighting equipment is maintained and used when conditions warrant its use.

15. Maintain good housekeeping conditions at all times.

16. Investigate all injuries and incidents to determine their cause and potential corrective action.

17. Ascertain that all injuries involving our employees that require medical attention are properly treated and promptly reported immediately following the procedures laid out in our post incident response protocol.

Every employee is responsible for working safely, both for self-protection and for protection of fellow co-workers. Employees must also support all company safety efforts. Specific employee safety responsibilities include:

1. If you are unsure how to do any task safely, ask your supervisor.

2. Read and abide by all requirements of the Health, Safety, Environmental Manual and Injury and Illness Prevention Program (IIPP).

3. Know and follow the Code of Safe Practices and all company safety policies and procedures.

4. Wear all required personal protective equipment (PPE).

5. Report all incidents and injuries, no matter how minor, to your supervisor immediately.

6. Do not operate any equipment you have not been trained on or authorized to use.

7. Report any safety hazards or defective equipment immediately to your supervisor.

8. Do not remove, tamper with, or defeat any guard, safety device, or interlock.

9. Never use any equipment with inoperative or missing guards, safety devices, or interlocks.

10. Never possess or be under the influence of alcohol or controlled substances while on the premises.

11. Never engage in horseplay or fighting.

12. Participate in and actively support the safety program.
Employee Safety Training

California law requires that employees be trained in the safe methods of performing their job. Cirks Construction Inc. is committed to instructing all employees in healthy and safe work practices. Awareness of potential hazards, as well as knowledge of how to control them, is critical in maintaining a healthy and safe work environment in preventing injuries. To achieve this goal, we will provide training to each employee on general safety issues and safety procedures specific to that employee’s work assignment.

Every new field employee will be given instruction by his or her supervisor in the general safety requirements of their job. A copy of our Code of Safe Practices shall also be provided to each employee.

Field managers, supervisors, and employees will be trained at least twice per year on various incident prevention topics.

Training provides the following benefits:

- Makes employees aware of job hazards
- Teaches employees to perform jobs safely
- Promotes two-way communication
- Encourages safety suggestions
- Creates interest in the safety program
- Fulfills CAL-OSHA requirements

Employee training will be provided at the following times:

1. New field employees will receive a safety orientation.
2. New field employees will be given a copy of the Code of Safe Practices and required to read and sign for it.
3. Employees given a new job assignment, for which training has not been previously provided, will be trained before beginning the new assignment.
4. Whenever new substances, processes, procedures, or equipment that represent a new hazard are introduced into the workplace.
5. Whenever Cirks Construction Inc. is made aware of a new or previously unrecognized hazard.
6. Whenever management believes that additional training is necessary.
7. After all serious incidents.
8. When employees are not following safe work policies and procedures.
Training topics will include, but are not be limited to:

- Code of Safe Practices
- Employee’s safety responsibility
- General safety rules
- Safe job procedures
- Ergonomics
- Safe lifting and material handling practices
- Use of hazardous materials
- Use of equipment
- Emergency procedures
- Contents of the safety program

Documentation of Training:

All training will be documented on the following form:

“New Employee Safety Orientation Form”

The following training method should be used. Actual demonstrations of the proper way to perform a task are very helpful in most cases.

- **Instruct them** how to do the job safely.
- **Train them** how to do the job safely.
- **Have them tell you** how to do the job safely.
- **Have them show you** how to do the job safely.
- **Follow up** to ensure they are still performing the job safely.
Field Employee Safety Training

The supervisor will verbally cover the following items with each new field employee on the first day of their employment.

Employee Name: ____________________________  Start Date: __________________

Safety Manager/Supervisor: ________________________________________________

Employee Position: _________________________________________________________

Instruction has been received in the following areas:

☐ 2. Hazard Communication (Right to Know Policy)
☐ 3. Driving Safety Rules.*
☐ 4. Safety rule enforcement procedures.
☐ 5. Necessity of reporting ALL injuries, no matter how minor, IMMEDIATELY.
☐ 6. Proper method of reporting safety hazards.
☐ 7. Emergency procedures and First Aid.
☐ 8. Proper work clothing and required personal protective equipment.
☐ 9. List all special equipment, such as lifts, employee is trained and authorized to operate.
☐ 10. Emergency Exits and Fire Extinguishers.

* Give a copy of these items to the employee.

Note any special requirements:

___________________________________________________________________________
___________________________________________________________________________

I agree to abide by all company safety polices and the Code of Safe Practices. I also understand that failure to do so may result in disciplinary action or possible termination.

Signature: ______________________________________________
           (Employee)

Signature: ______________________________________________
           (Safety Manager / Supervisor)
**Safety Communication**

This section establishes procedures designed to develop and maintain employee involvement and interest in the HSE Manual and IIPP. These activities will also ensure effective communication between management and employees on safety related issues that is of prime importance to Cirks Construction Inc. The following are some of the safety communication methods that may be used:


2. Periodic safety meetings with employees that encourage participation and open two-way communication.

3. Provision and maintenance of employee notices discussing safety issues, incidents, and general safety suggestions.

4. Written communications from management or the safety director, including memos, postings, payroll stuffers, and newsletters.

5. Anonymous safety suggestion program.

Employees will be kept advised of highlights and changes relating to the safety program. Management shall relay changes and improvements regarding the safety program to employees, as appropriate. Employees will be involved in future developments and safety activities by requesting their opinions and comments be reviewed, as necessary.

All employee initiated safety related suggestions shall be properly answered, either verbally or in writing, by the appropriate level of management. All employees are encouraged to bring any safety concerns they may have to the attention of management. Cirks Construction Inc. will not discriminate against any employee for raising safety issues or concerns.

Cirks Construction Inc. welcomes anonymous notification whereby employees who wish to inform the company of workplace hazards without identifying themselves may do so by phoning or sending written notification to the safety director or company manager.
Enforcement of Safety Policies

The compliance of all employees with the Cirks Construction Inc. HSE Manual and IIPP is mandatory and shall be considered a condition of employment.

The following programs will be utilized to ensure employee compliance with the safety program and all safety rules.

- Training programs
- Retraining
- Optional safety incentive programs
- Disciplinary action

Training Programs

The importance of safe work practices and the consequences of failing to abide by safety rules will be covered in the New Employee Safety Orientation and safety meetings. This will help ensure that all employees understand and abide by Cirks Construction Inc. safety policies.

Safety Correction Notices

Employees or subcontractors that are observed performing unsafe acts or not following proper policies or procedures will be corrected by their supervisor. A Safety Correction Notice may be completed by the supervisor to document the infraction. If multiple employees are involved, additional safety training will be held.

Safety Incentive Programs

Although strict adherence to safety policies and procedures is required of all employees, the company may choose to periodically provide recognition of safety-conscious employees and job sites without incidents through a safety incentive program.

Disciplinary Action

The failure of an employee to adhere to safety policies and procedures established by Cirks Construction Inc. can have a serious impact on everyone concerned. An unsafe act can not only threaten the health and well-being of the employee committing the unsafe act, but it can also affect the safety of his or her co-workers and customers. Accordingly, any employee who violates any of the Company’s safety policies and procedures will be subject to disciplinary action or dismissal.

Note: Failure to promptly report any on-the-job incident or injury, on the same day as the occurrence, is considered a serious violation of the Company’s Code of Safe Practices. Any employee who fails to immediately report a work-related incident or injury, no matter how minor, shall be subject to disciplinary action or dismissal.

Employees will be disciplined for infractions of safety policies and procedures where unsafe work practices are observed, not just those that result in an injury. Often, when an injury occurs, the incident investigation will reveal that the injury was caused because the employee
violated an established safety policy or safe work practice. In any disciplinary action, the supervisor should be cautious that discipline is given to the employee for safety violations, and not simply because the employee was injured on the job or filed a Workers’ Compensation claim.

Violations of safety rules and the Code of Safe Practices are to be considered equal to violations of other company policies.

As in all disciplinary actions, each situation is to be carefully evaluated and investigated. The particular step taken in the disciplinary process will depend on the severity of the violation, employee history, and regard to safety. Managers and supervisors should consult with the Human Resources Manager if there is any question about whether or not disciplinary action is justified. Employees may be terminated immediately for willful or extremely serious violations.
Hazard Identification and Evaluation

To assist in the identification and correction of hazards, Cirks Construction Inc. has developed the following procedures. These procedures are representative only and are not exhaustive of all the measures and methods that will be implemented to guard against injury from recognized and potential hazards in the workplace. As new hazards are identified or improved work procedures developed, they will be promptly incorporated into our Safety Manual. The following methods will be utilized to identify hazards in the workplace:

- Loss Prevention Self-Assessment
- Loss analysis of incident trends
- Incident investigations
- Employee observation
- Employee suggestions
- Regulatory requirements for our industry
- Periodic safety inspections at minimum monthly
- Documentation of inspections

Loss Analysis

Periodic loss analyses will be conducted by the safety director and all superintendents. These will help identify areas of concern and potential job hazards. The results of these analyses will be communicated to management, supervisors, and employees through safety meetings and other appropriate means.

Incident Investigations

All near loss incidents (NLI) must be reported. Incidents and injuries will be investigated in accordance with the guidelines contained in this program. Incident investigations will focus on causal factors and corrective action, including the identification and correction of hazards that may have contributed to the incident.

Employee Observation

Superintendents and foremen shall be continually observing employees for unsafe actions or conditions and taking corrective action as necessary.

Employee Suggestions

Employees are encouraged to report any hazard they observe to their supervisors. No employee of Cirks Construction Inc. is to ever be disciplined or discharged for reporting any workplace hazard or unsafe condition. However, employees who do NOT report potential hazards or unsafe conditions that they are aware of will be subject to disciplinary action.

Regulatory Requirements

All industries are subject to government regulations relating to safety. Many of these regulations are specific to our type of business. Copies of pertinent regulations can be obtained from the safety director.
Periodic Safety Inspections

Periodic safety inspections ensure that physical and mechanical hazards are under control and identify situations that may become potentially hazardous. Inspections shall include a review of the work habits of employees in all work areas. These inspections will be conducted by the supervisor, manager, safety director, or other designated individual.

Periodic safety inspections will be conducted:

- When new substances, processes, procedures, or equipment are used.
- When new or previously unrecognized hazards are identified.
- Periodically by the supervisor.
- Periodically by the safety director.

These inspections will focus on both unsafe employee actions as well as unsafe conditions. The following is a partial list of items to be checked:

- Compliance with the Code of Safe Practices.
- The proper use, condition, maintenance, and grounding of all electrically operated equipment.
- The proper use, condition, and maintenance of safeguards for all power-driven equipment.
- Housekeeping and personal protective equipment (PPE).
- Hazardous materials.
- Proper material storage.
- Provision of first aid equipment and emergency medical services.

Any and all hazards identified will be corrected as soon as practical in accordance with the Cirks Construction Inc. hazard correction policy.

If imminent or life threatening hazards are identified which cannot be immediately corrected, all employees must be removed from the area, except those with special training required to correct the hazard. Employees with special training required to correct the hazard will be provided necessary safeguards.

Documentation of Inspections

Safety inspections will be documented to include the following:

- Date on which the inspection was performed.
- The name and title of person who performed the inspection.
- Any hazardous conditions noted or discovered, and the steps or procedures taken to correct them.
- Signature of the person who performed the inspection.

One copy of the completed form should be sent to the office. All reports shall be kept on file for a minimum of two (2) years.
**SAFETY AUDIT CHECKLIST**

<table>
<thead>
<tr>
<th>JOB NAME</th>
<th>SUPERINTENDENT NAME</th>
<th>INSPECTION DATE</th>
<th>COMPLETION OF PROJECT</th>
<th>INSPECTOR NAME</th>
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### GENERAL

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<tr>
<th>Item</th>
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<tbody>
<tr>
<td>KDC Signage</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Job Site Rules Posted</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Sign In Sheet</td>
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<td></td>
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<tr>
<td>Pedestrian Protection</td>
<td></td>
<td></td>
<td></td>
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<tr>
<td>Perimeter Protection</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Duty To Warn – Duty To Protect – Duty to Control</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Accident Reporting Instructions</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Safety &amp; Health Program (IIPP)</td>
<td></td>
<td></td>
<td></td>
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<tr>
<td>Safety Data Sheets</td>
<td></td>
<td></td>
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<tr>
<td>First Aid Kit</td>
<td></td>
<td></td>
<td></td>
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<tr>
<td>Eye Wash Station</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Tailgate Meeting Documentation</td>
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<td></td>
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<tr>
<td>Plans/Specs/ Drawings of job</td>
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<td></td>
<td></td>
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<tr>
<td>Fire Extinguishers - Fire extinguishers inspected &amp; tagged</td>
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</tr>
<tr>
<td>Emergency Evacuation Plan (EEP)</td>
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<td></td>
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<tr>
<td>Medical Clinic and Map</td>
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### JOB HAZARD ANALYSIS FOR CRITICAL WORK

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<td>Crane Activity</td>
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</tr>
<tr>
<td>Excavation 5 ft or greater</td>
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<tr>
<td>Scaffold Work</td>
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<td></td>
<td></td>
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<tr>
<td>Confined Space Work</td>
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<td></td>
<td></td>
</tr>
<tr>
<td>Hot Work</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Working at heights in excess of 10ft</td>
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### PERSONAL PROTECTIVE EQUIPMENT (PPE)

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<tbody>
<tr>
<td>Face shield being used when chipping, grinding, chop saw etc....</td>
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<td></td>
<td></td>
</tr>
<tr>
<td>Hard hat</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Safety Glasses</td>
<td></td>
<td></td>
<td></td>
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<tr>
<td>Cut Resistant Gloves</td>
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### Class II Vest
Respiratory Protection

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<td>Rescue Plan Completed</td>
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<tr>
<td>Retrieval Method Available</td>
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<td>Equipment Inspection Conducted</td>
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<td>Fall Protection ABC’s followed</td>
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<td>Daily Signed Green tag by Comp Person</td>
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</tr>
<tr>
<td>Plumb</td>
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<td></td>
<td></td>
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<tr>
<td>Base Plates &amp; Mudsills</td>
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<td></td>
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<tr>
<td>Plank Size, spacing and construction</td>
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<td></td>
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<tr>
<td>Guardrails</td>
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<td></td>
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<tr>
<td>Access Ladder</td>
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<td>KDC Crane Plan Followed</td>
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<tr>
<td>JHA</td>
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<tr>
<td>Pic Plan Completed</td>
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<tr>
<td>Rigging Plan</td>
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<table>
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<td>JHA completed</td>
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<td>Confined Space Plan (CSP)</td>
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<tr>
<td>Use of sniffer</td>
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<td>CP Permit</td>
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<tbody>
<tr>
<td>Utility companies contacted and/or utilities located.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Exact location of utilities marked when near excavation.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Underground installations protected</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Precautions taken to protect employees from accumulation of water.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Surface water controlled or diverted.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Atmosphere tested</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Oxygen content is between 19.5% and 21%.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Flammable gas build-up to 20% of lower explosive limit (LEL).</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Toxic Levels of gases are below limits set on gas monitor.
Ventilation blowing into space and air intake placed away from vehicle exhaust

<table>
<thead>
<tr>
<th>EXCAVATION/TRENCHING/SHARING</th>
<th>YES</th>
<th>NO</th>
<th>N/A</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pre-Excavation Report</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>JHA</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Soil Test – Type (circle one)</td>
<td>ABC</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Protective device</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Atmospheric Testing</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Current Conditions N/A</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Terrain, Weather, Water accumulation</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Traffic conditions</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Heavy equipment location</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Spoils location</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Trench width</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Trench depth</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Access / egress conditions</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>ELECTRICAL</th>
<th>YES</th>
<th>NO</th>
<th>N/A</th>
</tr>
</thead>
<tbody>
<tr>
<td>Lock Out Tag Out</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>JHA</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Tailgate Meeting</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>FLAMMABLE &amp; COMBUSTIBLE LIQUIDS</th>
<th>YES</th>
<th>NO</th>
<th>N/A</th>
</tr>
</thead>
<tbody>
<tr>
<td>Stored and handled in appropriately container</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Labeled Correctly</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Right To Know Poster</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>MOBILE EQUIPMENT</th>
<th>YES</th>
<th>NO</th>
<th>N/A</th>
</tr>
</thead>
<tbody>
<tr>
<td>Daily inspection conducted on all mobile equipment - documented</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Owner’s manual secured in all mobile equipment</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Seat belts functional and worn on mobile equipment (as required)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Proper attachments used on all mobile equipment</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Hazard Correction

The following procedures will be used to evaluate, prioritize, and correct identified safety hazards. Hazards will be corrected in order of priority; the most serious hazards will be corrected first.

Hazard Evaluation

Factors that will be considered when evaluating hazards include:

- **Potential severity** - The potential for serious injury, illness, or fatality.
- **Likelihood of exposure** - The probability of the employee coming into contact with the hazard.
- **Frequency of exposure** - How often employees come into contact with the hazard.
- **Number of employees exposed**
- **Possible corrective actions** - What can be done to minimize or eliminate the hazard?
- **Time necessary to correct** - The time necessary to minimize or eliminate the hazard.

Techniques for Correcting Hazards

1. **Engineering Controls:** Could include machine guarding, ventilation, noise reduction at the source, and provision of material handling equipment. These are the first and preferred methods of control.

2. **Administrative Controls:** The next most desirable method would include rotation of employees or limiting exposure time.

3. **Personal Protective Equipment:** Includes hard hats, hearing protection, respirators, and safety glasses. These are often the least effective controls for hazards and should be relied upon only when other controls are impractical.

Documentation of Corrective Action

All corrective action taken to mitigate hazards should be documented. Depending on the circumstances, one of the following forms should be used:

- Safety contact report
- Safety meeting report
- Memo or letter
- Safety inspection form

All hazards noted on safety inspections will be re-checked on each subsequent inspection and notations made as to their status.
**Incident Investigation**

The supervisor, manager, or other designated individual will investigate all work-related incidents in a timely manner. This includes minor incidents and "near loss incidents," as well as serious injuries. An incident is defined as any unexpected occurrence that results in injury to personnel, damage to equipment, facilities, material, or interruption of normal operations.

**Responsibility for Incident Investigation**

Immediately upon being notified of an incident, the supervisor, manager, or other designated individual shall conduct an investigation. The purpose of the investigation is to determine the cause of the incident and corrective action to prevent future reoccurrence; not to fix blame or find fault. An unbiased approach is necessary in order to obtain objective findings.

**The Purpose of Incident Investigations**

- To prevent or decrease the likelihood of similar incidents.
- To identify and correct unsafe work practices and physical hazards. Incidents are often caused by a combination of these two factors.
- To identify training needs. This makes training more effective by focusing on factors that are most likely to cause incidents.

**What Types of Incidents Do We Investigate**

- Fatalities
- Serious injuries
- Minor injuries
- Property damage
- Near losses

**Procedures for Investigation of Incidents**

Immediately upon being notified of an incident the supervisor, manager, or other designated individual will:

1. Visit the incident scene, as soon as possible, while facts and evidence are still fresh and before witnesses forget important details and to make sure hazardous conditions to which other employees or customers could be exposed are corrected or have been removed.

2. Provide for needed first aid or medical services for the injured employee(s).

3. If possible, interview the injured worker at the scene of the incident and verbally "walk" him or her through a re-enactment. All interviews should be conducted as privately as possible. Interview all witnesses individually and talk with anyone who has knowledge of the incident, even if they did not actually witness it.

4. Report the incident to the safety director and supervisors immediately. All serious incidents will be reported to the insurance carrier as soon as possible.
5. Consider taking signed statements in cases where facts are unclear or there is an element of controversy.

6. Thoroughly investigate the incident to identify all incident causes and contributing factors. Document details graphically. Use sketches, diagrams and photos as needed. Take measurements when appropriate.

7. All incidents involving death, disfigurement, amputation, loss of consciousness, or hospitalization for more than 24 hours must be reported to CAL-OSHA immediately.

8. Focus on causes and hazards. Develop an analysis of what happened, how it happened, and how it could have been prevented. Determine what caused the incident itself, not just the injury.

9. Every investigation must also include an action plan. How can such incidents be prevented in the future?

10. In the event a third party or defective product contributed to the incident, save any evidence as it could be critical to the recovery of claim costs.

**Accurate and Prompt Investigations**

- Ensures information is available
- Causes can be quickly corrected
- Helps identify all contributing factors
- Reflects management concerns
- Reduces chance of recurrence

**Investigation Tips**

- Avoid placing blame
- Document with photos and diagrams, if needed
- Be objective, get the facts
- Reconstruct the event
- Use open-ended questions

**Questions to Ask**

When investigating incidents, open-ended questions such as; who, what, when, where, why, and how, will provide more information than closed-ended questions such as "Were you wearing gloves?"

Examples include:

- How did it happen?
- Why did it happen?
- How could it have been prevented?
- Who was involved?
• Who witnessed the incident?
• Where were the witnesses at the time of the incident?
• What was the injured worker doing?
• What was the employee working on?
• When did it happen?
• When was the incident reported?
• Where did it happen?
• Why was the employee assigned to do the job?

The single, most important question that must be answered as the result of any investigation is:

“What do you recommend to be done (or have you done) to prevent this type of incident from recurring?”

Once the Incident Investigation is completed

• Take or recommend corrective action
• Document corrective action
• Management and the safety director will review the results of all investigations
• Consider safety program modifications
• Information obtained through incident investigations can be used to update to improve our current program
**Program Records**

The safety director will ensure the maintenance of all HSE Manual and IIPP records, for the listed periods, including:

1. New Employee Safety Orientation Forms  \(\text{Length of Employment}\)
2. Code of Safe Practices Receipt  \(\text{Length of Employment}\)
3. Disciplinary Actions for Safety  \(\text{Length of Employment}\)
4. Safety Inspections  \(2\text{ years}\)
5. Safety Meeting Reports  \(2\text{ years}\)
6. Safety Correction Notices  \(2\text{ years}\)
7. Incident Investigations  \(5\text{ years}\)
8. CAL-OSHA Log of Injuries  \(5\text{ years}\)
9. Inventory of Hazardous Materials (if any)  \(\text{Indefinitely}\)
10. Employee Exposure or Medical Records  \(\text{Indefinitely}\)

Note: Records are available for review upon request.
Emergency Medical Services and First Aid

Cirks Construction Inc. will ensure the availability of emergency medical services for its employees at all times. We will also ensure the availability of a suitable number of appropriately trained persons to render first aid. The safety director will maintain a list of trained individuals and take steps to provide training for those that desire it.

First-Aid Kits

Every work site shall have access to at least one first-aid kit in a weatherproof container. The first-aid kit will be inspected regularly to ensure that it is well stocked, in sanitary condition, and any used items are promptly replaced. The contents of the first-aid kit shall be arranged to be quickly found and remain sanitary. First-aid dressings shall be sterile and in individually sealed packages. The following minimum first-aid supplies shall be kept.

<table>
<thead>
<tr>
<th>Type of Supply Required by Number of Employees</th>
<th>1-5</th>
<th>6-15</th>
<th>16-200</th>
<th>200+</th>
</tr>
</thead>
<tbody>
<tr>
<td>Dressings in adequate quantities consisting of:</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Adhesive dressings</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td>Adhesive tape rolls, 1-inch wide</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td></td>
</tr>
<tr>
<td>Eye dressing packet</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td></td>
</tr>
<tr>
<td>1-inch gauze bandage roll or compress</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td>2-inch gauze bandage roll or compress</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td></td>
</tr>
<tr>
<td>4-inch gauze bandage roll or compress</td>
<td>X</td>
<td>X</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Sterile gauze pads, 2-inch square</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td></td>
</tr>
<tr>
<td>Sterile gauze pads, 4-inch square</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td></td>
</tr>
<tr>
<td>Sterile surgical pads suitable for pressure dressings</td>
<td>X</td>
<td>X</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Triangular bandages</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td>Safety pins</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td>Tweezers and scissors</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td></td>
</tr>
<tr>
<td>Cotton-tipped applicators*</td>
<td>X</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Forceps*</td>
<td>X</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Emesis basin*</td>
<td>X</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Flashlight*</td>
<td>X</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Magnifying glass*</td>
<td>X</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Portable oxygen and its breathing equipment*</td>
<td>X</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Tongue depressors*</td>
<td>X</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Appropriate record forms*</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td>First-aid textbook, manual or equivalent*</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
</tr>
</tbody>
</table>

*To be readily available but not necessarily within the first-aid kit.

Drugs, antiseptics, eye irrigation solutions, inhalants, medicines, or proprietary preparations shall not be included in Cirks Construction Inc. first-aid kits unless specifically approved, in writing, by an employer-authorized licensed physician. Other supplies and equipment, if provided, shall be in accordance with the documented recommendations of an employer-authorized licensed physician upon consideration of the extent and type of emergency care to be given based upon the anticipated incident and nature of injuries and illnesses and availability of transportation to medical care.
First Aid

The designated first aid person on each site will be available to render appropriate first aid for injuries and illnesses. Proper equipment for the prompt transportation of the injured or ill person to a physician or hospital where emergency care is provided, or an effective communication system for contacting hospitals or other emergency medical facilities, physicians, ambulance, and fire services, shall also be provided. The telephone numbers of the following emergency services in the area shall be posted near the job telephone, or otherwise made available to the employees where no job site telephone exists:

1. A company authorized physician or medical clinic, and at least one alternate if available.
2. Hospitals.
3. 911.
4. Fire-protection services.
5. Police services.

Prior to the commencement of work at any site, the supervisor or manager shall locate the nearest preferred medical facility and establish that transportation or communication methods are available in the event of an employee injury.

Each employee shall be informed of the procedures to follow in case of injury or illness through our new employee orientation program, Code of Safe Practices, and safety meetings.

Incident Procedures

These procedures are to be followed in the event of an employee injury in the course of employment:

1. For severe incidents call 911 and request the Paramedics.

2. Employees must report all work related injuries to their supervisor immediately even if they do not feel that it requires medical attention. Failure to do so may result in a delay of Workers’ Compensation benefits and disciplinary action could be taken.

3. The supervisor and employee should determine whether or not outside medical attention is needed.

4. If medical attention is not desired or the employee refuses treatment, you must still fill out a Cirks Construction Inc. "Incident Report" in case complications arise later.

5. In all cases, if the employee cannot transport himself or herself for any reason, transportation should be provided.

6. In the event of a serious incident involving hospitalization for more than 24 hours, amputation, permanent disfigurement, loss of consciousness, or death, phone contact should be made with the office immediately. Contact must also be made by the safety director with the nearest CAL-OSHA office within 8 hours.
Introduction

It is the policy of Cirks Construction Inc. that the first consideration of work shall be the protection of the health and safety of all employees. We have developed this Hazard Communication Program to ensure that all employees receive adequate information about the possible hazards that may result from the various materials used in our operations. This Hazard Communication Program will be monitored by our safety director, who will be responsible for ensuring that all facets of the program are carried out, and that the program is effective.

Our program consists of the following elements:

1. Hazardous material inventory
2. Collection and maintenance of Safety Data Sheets (SDS)
3. Container labeling
4. Employee training

The following items are not required to be included in the program and are therefore omitted:

- Foods, drugs, cosmetics, and tobacco
- Untreated wood products
- Hazardous waste
- Consumer products packaged for sale to and use by the general public provided that our exposure is not significantly greater than typical consumer exposure

Hazardous Material Inventory

The job site superintendent maintains a list of all hazardous materials used in our operations. This list contains the name of the product, the type of product (solvent, adhesive, etc.), and the name and address of the manufacturer.

Safety Data Sheets (SDS)

Copies of SDS for all hazardous substances, to which our employees may be exposed, will be kept in a binder at the job site and stored electronically at the office. SDS will be made available to all employees, at all times, upon request. Copies of the most commonly used products will also be kept by the supervisor at the work site.

The safety director and on-site superintendent will be responsible for reviewing incoming SDS for new and significant health and safety information. They will ensure that any new information is passed on to the affected employees.

They will also review all incoming SDS for completeness. If an SDS is missing or obviously incomplete, a new SDS will be requested from the manufacturer. CAL-OSHA will be notified if a complete SDS is not received and the manufacturer will not supply one.

New materials will not be introduced into the shop or field until a SDS has been received. The employees purchasing materials will make it an ongoing part of their function to obtain SDS for all new materials when they are first ordered.
Container Labeling

No container of hazardous substances will be used unless the container is correctly labeled and the label is legible.

All chemicals in cans, bags, drums, pails, etc., will be checked by the receiving department to ensure the manufacturer's label is intact, is legible, and has not been damaged in any manner during shipment. Any containers found to have damaged labels will be held until a new label has been installed. New labels will be obtained from the manufacturer.

The label must contain:
- The chemical name of the contents
- The appropriate hazard warnings
- The name and address of the manufacturer

All secondary containers will be labeled as to their contents with a reference to the original label.

Employee Information and Training

All employees will be provided information and training on the following items through the Cirks Construction Inc. safety training program and prior to starting work with hazardous substances:

1. An overview of the requirements of the Hazard Communication Standard, including their rights under this regulation.
2. Information regarding the use of hazardous substances in their specific work areas.
3. The location and availability of the written hazard communication program. The program will be available from the job site specific superintendent.
4. The physical and health hazards of the hazardous substances in use.
5. Methods and observation techniques used to determine the presence or release of hazardous substances in the work area.
6. The controls, work practices, and personal protective equipment that is available for protection against possible exposure.
7. Emergency and first aid procedures to follow if employees are exposed to hazardous substances.
8. How to read labels and Safety Data Sheets (SDS) to obtain the appropriate hazard information.

Hazardous Non-Routine Tasks

Infrequently, employees may be required to perform hazardous non-routine tasks. Prior to starting this work, each involved employee will be given information by his or her supervisor about hazards to which they may be exposed during such activity.

This information will include:
- The specific hazards
- Protective and safety measures which must be utilized
• The measures the company has taken to lessen the hazards, including special ventilation, respirators, the presence of another employee, emergency procedures, etc.

Informing Outside Contractors and Vendors

To ensure that outside contractors are not exposed to our hazardous materials, and to ensure the safety of the contractor’s employees, it will be the responsibility of the supervisor to provide outside contractors the following information:

• The hazardous substances under our control that they may be exposed to while at the work site.
• The precautions the contractor’s employees must take to lessen the possibility of exposure.

We will obtain from outside contractors and vendors the name of any hazardous substances the contractor’s employees may be using at a work site or bringing into our facility. The contractor must also supply a copy of the material safety data sheet relevant to these materials.

Employee Rights Under The Hazard Communication Standard

At any time, an employee has the right to:

• Access the SDS folder, and the Hazard Communication Program.
• Receive a copy of any environmental sampling data collected in the workplace.
• See their employment medical records upon request.
Written Hazard Communication Plan

The management of KDC Construction is committed to preventing accidents and ensuring the safety and health of our employees. We will comply with all applicable federal and state health and safety rules and provide a safe, healthful environment for all our employees. This written hazard communication plan is available at the following location for review by all employees: [Intranet, Office & at each job site location.

Identifying hazardous chemicals

Found within the SDS Master Book is a list that identifies all hazardous chemicals with a potential for employee exposure at this workplace. Detailed information about the physical, health, and other hazards of each chemical is included in a Safety Data Sheet (SDS); the product identifier for each chemical on the list matches and can be easily cross-referenced with the product identifier on its label and on its Safety Data Sheet.

Identifying containers of hazardous chemicals

All hazardous chemical containers used at this workplace will either the original manufacturer’s label -- that includes a product identifier, an appropriate signal word, hazard statement(s), pictogram(s), precautionary statement(s) and the name, address, and telephone number of the chemical manufacturer, importer, or other responsible party -- OR a label with the appropriate label elements just described; OR workplace labeling that includes the product identifier and words, pictures, symbols, or combination that provide at least general information regarding the hazards of the chemicals.

The safety director, Stuart Nakutin and all superintendents will ensure that all containers are appropriately labeled. No container will be released for use until this information is verified. Workplace labels must be legible and in English. Information in other languages is available upon request.

Keeping Safety Data Sheets (previously known as Material Safety Data Sheets)

Safety Data Sheets are readily available to all employees during their work shifts. Employees can review Safety Data Sheets for all hazardous chemicals used at this workplace.

The Safety Data Sheets are updated and managed by Stuart Nakutin, KDC’s safety director. If a Safety Data Sheet is not immediately available for a hazardous chemical, employees can obtain the required information by calling Stuart Nakutin at 714-400-5023.

Training employees about chemical hazards

Before they start their jobs or are exposed to new hazardous chemicals, employees must attend a hazard communication training that covers the following topics:

- An overview of the requirements in OSHA’s hazard communication rules.
- Hazardous chemicals present in their workplace.
- Any operations in their work area where hazardous chemicals are used.
- The location of the written hazard communication plan and where it may be reviewed.
- How to understand and use the information on labels and in Safety Data Sheets.
- Physical and health hazards of the chemicals in their work areas.
• Methods used to detect the presence or release of hazardous chemicals in the work area.
• Steps we have taken to prevent or reduce exposure to these chemicals.
• How employees can protect themselves from exposure to these hazardous chemicals through use of engineering controls/work practices and personal protective equipment.
• An explanation of any special labeling present in the workplace.
• Emergency procedures to follow if an employee is exposed to these chemicals.

Stuart Nakutin is responsible to ensure that employees receive this training. After attending the training, employees will sign a form verifying that they understand the above topics and how the topics are related to our hazard communication plan.

Informing contractors and other employers about our hazardous chemicals

If employees of other employer(s) may be exposed to hazardous chemicals at our workplace (for example, employees of a construction contractor working on-site) It is the responsibility of the job site superintendent to provide contractors and their employees with the following information:

- The identity of the chemicals, how to review our Safety Data Sheets, and an explanation of the container and pipe labeling system.
- Safe work practices to prevent exposure.

The job site superintendents will also obtain a Safety Data Sheet for any hazardous chemical a contractor brings into the workplace.

Hazard Communication Safety Data Sheets

The Hazard Communication Standard (HCS) requires chemical manufacturers, distributors, or importers to provide Safety Data Sheets (SDSs) (formerly known as Material Safety Data Sheets or MSDSs) to communicate the hazards of hazardous chemical products. As of June 1, 2015, the HCS will require new SDSs to be in a uniform format, and include the section numbers, the headings, and associated information under the headings below:

**Section 1, Identification** includes product identifier; manufacturer or distributor name, address, phone number; emergency phone number; recommended use; restrictions on use.

**Section 2, Hazard(s) identification** includes all hazards regarding the chemical; required label elements.

**Section 3, Composition/information on ingredients** includes information on chemical ingredients; trade secret claims.

**Section 4, First-aid measures** includes important symptoms/ effects, acute, delayed; required treatment.

**Section 5, Fire-fighting measures** lists suitable extinguishing techniques, equipment; chemical hazards from fire.

**Section 6, Accidental release measures** lists emergency procedures; protective equipment; proper methods of containment and cleanup.
Section 7, Handling and storage lists precautions for safe handling and storage, including incompatibilities.

Section 8, Exposure controls/personal protection lists OSHA’s Permissible Exposure Limits (PELs); Threshold Limit Values (TLVs); appropriate engineering controls; personal protective equipment (PPE).

Section 9, Physical and chemical properties lists the chemical's characteristics.

Section 10, Stability and reactivity lists chemical stability and possibility of hazardous reactions.

Section 11, Toxicological information includes routes of exposure; related symptoms, acute and chronic effects; numerical measures of toxicity.

Section 12, Ecological information*

Section 13, Disposal considerations*

Section 14, Transport information*

Section 15, Regulatory information*

Section 16, Other information, includes the date of preparation or last revision.

*Note: Since other Agencies regulate this information, OSHA will not be enforcing Sections 12 through 15(29 CFR 1910.1200(g)(2)).

Employers must ensure that SDSs are readily accessible to employees.
Fall Protection

Cirks Construction Inc. has the following requirements for fall protection at all of our worksites.

Fall Protection is Required

When working where there is a hazard of falling 6 ft. or more from the perimeter of a structure, unprotected sides and edges, leading edges, through shaft ways and openings, sloped roof surfaces steeper than 7:12, or other sloped surfaces steeper than 40 degrees not otherwise adequately protected, fall protection is 100% mandatory, in addition it is also required when working on all temporary elevated platforms (example: scissor and boom lifts).

Fall Protection Types

One of the following four types of fall protection systems will be used when our employees are exposed to fall hazards of 6 feet or more:

1. Standard guardrails, safety cables, or floor hole covers
2. Personal fall arrest systems
3. Positioning device systems
4. Personal fall restraint systems

Standard Guardrails, Safety Cables, or Covers

These are the easiest and most cost effective methods of providing fall protection and have a very high success rate. Standard guardrails, safety cables, floor hole, and sky light covers are our preferred means of fall protection on job sites. The following rules will be followed when using them:

1. Railings shall be constructed of wood or in an equally substantial manner from other materials. They shall consist of a top rail, not less than 42 inches or more than 45 inches in height, measured from the upper surface of the top rail to the floor, platform, runway, or ramp level. The mid-rail shall be halfway between the top rail and the floor, platform, runway, or ramp. "Selected lumber" free from damage that affects its strength shall be used.

2. Wooden posts shall be no less than 2 inches by 4 inches in cross section, spaced at 8-foot or closer intervals.

3. Wooden top railings shall be smooth and of 2-inch by 4-inch or larger material. Double, 1-inch by 4-inch members may be used for this purpose provided that one member is fastened in a flat position on top of the posts and the other fastened in an edge-up position to the inside of the posts and the side of the top member. Mid-rails shall be of at least 1-inch by 6-inch material.

4. The rails shall be placed on the side of the post that will afford the greatest support and protection.
5. All railings, including their connections and anchorage, shall be capable of withstanding, without failure, a force of at least 250 pounds applied to the top rail within 3 inches of the top edge in any outward or downward direction at any point along the top edge. When the 250 pound test load is applied in a downward direction, the top edge of the guardrail should not deflect to a height less than 42 inches above the walking/working level.

6. Mid-rails, screens, mesh, intermediate vertical members, solid panels, and equivalent members shall be capable of withstanding, without failure, a force of at least 150 pounds applied in any downward or outward direction at any point along the mid-rail, screen, mesh, or other intermediate member.

7. Railings exposed to heavy stresses from employees trucking or handling materials shall provide additional strength by the use of heavier stock, closer spacing of posts, bracing, or by other means.

8. The ends of the rails will not overhang the terminal posts, except where such overhang does not constitute a projection hazard.

9. Railings will be of a smooth surface to prevent injury to an employee from punctures or lacerations, and to prevent snagging of clothing.

10. Steel banding and plastic banding shall not be used as top rails or mid-rails.

11. Railings receiving heavy stresses from employees trucking or handling materials shall provide additional strength by the use of heavier stock, closer spacing of posts, bracing, or by other means.

12. Floor, roof, and skylight openings shall be guarded by a standard railing with toe boards or a cover. Coverings shall be capable of safely supporting the greater of 400 pounds or twice the weight of worker(s) and material(s) placed thereon.

13. Coverings shall be secured in place to prevent incidental removal or displacement, and they should bear a pressure sensitized, painted, or stenciled sign with legible letters not less than one inch high, stating: “Opening--Do Not Remove.” Markings of chalk or keel should not be used.

14. Ladder-way floor openings or platforms shall be guarded by standard railings with standard toe boards on all exposed sides, except at the entrance to the opening, with the passage through the railing either provided with a swinging gate or so offset that a person cannot walk directly into the opening.

15. Floor holes, into which persons can incidentally walk, shall be guarded by either a standard railing with standard toe boards on all exposed sides, or a floor hole-cover of standard strength and construction that is secured against incidental displacement. While the cover is not in place, the floor hole should be protected by standard railings.

16. Wall openings, from which there is a drop of more than 4 feet, and the bottom of the opening is less than 3 feet above the working surface, shall be guarded with either a standard rail or intermediate rail or both.
17. An extension platform outside a wall opening onto which materials can be hoisted for handling shall have side rails or equivalent guards of standard specifications. One side of an extension platform may have removable railings in order to facilitate handling materials.

18. Wall opening protection barriers shall be of such construction and mounting that, when in place at the opening, the barrier is capable of withstanding a load of at least 250 pounds applied in any direction (except upward).

19. All elevator shafts in which cages are not installed and which are not enclosed with solid partitions and doors shall be guarded on all open sides by standard railings and toe boards.

20. A full body harness and lanyard are required when using scissor and boom lifts.

**Personal Fall Arrest Systems**

Personal fall arrest systems consist of a full body harness and the most appropriate connecting device attached to suitable anchorage. The system does not actually stop you from falling, but catches you and safely stops you from hitting the level below. Fall arrest systems will be our preferred means of protection when standard guardrails, safety cables, or covers are not practical. The following rules, in addition to the manufacturer’s requirements and OSHA regulations, will be observed:

1. Ropes and straps (webbing) used in lanyards, lifelines, and strength components of body harnesses shall be made from synthetic fibers except when they are used in conjunction with Hot Work where the lanyard may be exposed to damage from heat or flame.

2. Anchorages used for attachment of personal fall arrest equipment shall be independent of any anchorage being used to support or suspend platforms and capable of supporting at least 5,000 pounds per employee attached, or shall be designed, installed, and used as part of a complete personal fall arrest system which maintains a safety factor of at least two; and under the supervision of a qualified person.

3. The attachment point of the body belt shall be located in the center of the wearer's back. The attachment point of the body harness shall be located in the center of the wearer's back near shoulder level or above the wearer's head.

4. Where practical, the anchor end of the lanyard shall be secured at a level not lower than the employee's waist, limiting the fall distance to a maximum of 4 feet.

5. Harnesses, lanyards, and other components shall be used only for employee protection as part of a personal fall arrest system and not to hoist materials.

6. Personal fall arrest systems and components subjected to impact loading shall be immediately removed from service and shall not be used again for employee protection until inspected and determined by a competent person to be undamaged and suitable for reuse.
7. Cirks Construction Inc. shall provide for prompt rescue of employees in the event of a fall or shall assure that employees are able to rescue themselves.

8. Personal fall arrest systems shall be inspected prior to each use for wear, damage and other deterioration, and defective components shall be removed from service.

9. Any lanyard, safety harness, or drop line subjected to in-service loading, as distinguished from static load testing, shall be immediately removed from service and shall not be used again for employee safeguarding.

10. Personal fall arrest systems shall not be attached to guardrails, unless the guardrail is capable of safely supporting the load.

11. Each personal fall arrest system shall be inspected not less than twice annually by a competent person in accordance with the manufacturer’s recommendations. The date of each inspection shall be documented.

12. Personal fall arrest systems will be rigged such that an employee can neither free fall more than 4 feet, nor contact any lower level.

13. Personal fall arrest systems will bring an employee to a complete stop. They will also limit maximum deceleration distance an employee travels to 3.5 feet and have sufficient strength to withstand twice the potential impact energy of an employee free-falling a distance of 6 feet, or the free-fall distance permitted by the system, whichever is less.

Positioning Device Systems

Positioning device systems are designed to allow employees to work with both hands free at elevated locations. By their very nature, they provide some level of fall protection. They are not as effective as railings or fall arrest systems. Positioning device systems may be used together with a fall arrest system for greater safety. Their use shall conform to the following provisions:

1. Positioning devices shall be rigged such that an employee cannot free fall more than 2 feet.

2. Positioning device systems shall be inspected prior to each use for wear, damage, and other deterioration and defective components shall be removed from service.

3. Body belts, harnesses, and components shall be used only for employee protection (as part of a personal fall arrest system or positioning device system) and not to hoist materials.

4. The use of non-locking snap hooks is prohibited.

5. Anchorage points for positioning device systems shall be capable of supporting two times the intended load or 5,000 pounds, whichever is greater.

Personal Fall Restraint Systems
Fall restraint systems are designed to prevent the wearer from reaching the edge or danger area and thus prevent them from falling. Only full body personal fall arrest systems may be used for personal fall restraint.

1. Body belts shall be at least one and five-eighths (1-5/8”) inches wide.

2. Anchorage points used for fall restraint shall be capable of supporting 5,000 lbs.

3. Restraint protection shall be rigged to allow the movement of employees only as far as the sides of the working level or working area.
Aerial Lift Safety Procedures

Standard Procedures

To ensure safe practices, the following general procedure is used when an authorized user uses an aerial platform lift:

1. Obtain any necessary authorization to use the lift.

2. Check the last pre-start inspection for any comments or notes.

3. Perform a pre-start inspection on the lift, document the inspection, and place it in the reserved storage location on the lift.

4. Perform a workplace inspection in the area that the lift will be used.

5. Inspect and place your personal fall arrest systems. Note: Self-retracting lifelines are prohibited in scissor lifts.

6. Extend and adjust the outriggers, stabilizers, extendible axles, or other stability enhancing means.

7. Ensure that the guardrails are installed and are in place.

8. Ensure that the load being placed on the lift is within the rated capacity of the lift.

9. Test the controls of the lift.

10. Ensure that all personnel on the lift have been trained and authorized to operate or work on the platform.

Platform Qualifications

These are the specifications for platforms and the following criteria shall be met to be an approved platform on a lift:

1. Platform width shall be not less than 24 inches and shall have a slip resistant surface.

2. The platform shall have a guardrail system around its periphery. It is removable or can be lowered. The means used to secure it in the normal operating position shall be readily accessible for inspection and maintenance.

3. The guardrail system shall include a top rail that is between 42 and 45 inches high, a mid-rail that is approximately half-way from the platform to the top rail, and a toe board that is at least 3 ½ inches high.

When to use personal fall protection

When operating articulating or boom type lifts that are equipped with lanyard tie off points, the use of fall protection equipment is required. If special circumstances exist that encourage the
operator to use fall protection on vertical aerial platform lifts, they must tie off to a proper tie off point that is not attached to or part of the aerial platform lift itself.

**ANSI A92.6 series** states that a worker need only be protected from falling by a properly designed and maintained guardrail system. However, if the guardrail system is less than adequate or the worker leaves the safety of the work platform, an additional fall protection device would be required. The general scaffolding fall protection provision found in 1926.451(g)(1)(vii) reads in part, "[f]or all scaffolds not otherwise specified in this section, each employee shall be protected by the use of personal fall arrest systems or guardrails systems."

**Markings and Decals**

In addition to any other markings or decals that are placed on the lift by the manufacturer, the following information shall be displayed on all aerial platform lifts in a clearly visible, accessible area, and in a durable manner:

1. The make, model, serial number, and manufacturer’s name and address.
2. The rated workload, including rated number of occupants.
3. The maximum platform height.

**Safe Operation During Operation**

1. Attention shall be given towards the direction of travel, clearances above, below and on all sides.
2. Employees shall not sit or climb on the guardrails of the aerial lift.
3. Planks, ladders, or other devices shall not be used on the work platform.
4. An aerial lift shall not be moved when the boom is elevated in a working position with employees in the basket.
5. Aerial lift shall not be placed against another object to steady the elevated platform.
6. Aerial lift shall not be used as a crane or other lifting device.
7. Aerial lift devices shall not be operated on grades, side slopes, or ramps that exceed the manufacturer’s recommendations.
8. The brakes shall be set and outriggers, when used, shall be positioned on pads or a solid surface.
9. Speed of aerial lift devices shall be limited according to the conditions of the ground surface, congestion, visibility, slope, location of personnel, and other factors that may cause hazards to other nearby personnel.
10. Stunt driving and horseplay shall not be permitted.
11. Booms and elevated platform devices shall not be positioned in an attempt to jack the wheels off the ground.

12. The area surrounding the elevated platform shall be cleared of personnel and equipment prior to lowering the elevated platform.

13. All equipment must be secured on the inside of the aerial lift.

14. Operators are to call for assistance if the platform or any part of the machine becomes entangled.

**Inspections**

The inspection process is a critical step in preventing aerial lift incidents that are caused from faulty or worn out equipment. Aerial platform lifts that are not in proper operating condition shall be removed from service until the problems have been corrected by an authorized and trained maintenance technician.

**Pre-Start Inspections**

Before each day’s use or at the beginning of each shift that the aerial platform lift is used it shall be given a pre-start inspection, which is a visual inspection and functional test that includes the following criteria:

1. Operating and emergency controls.
2. Safety devices.
3. Personal protective devices.
4. Air, hydraulic, and fuel system leaks.
5. Cables and wiring harness.
6. Loose or missing parts.
7. Tires and wheels.
8. Placards, warnings, control markings, and operating manual(s).
9. Outriggers, stabilizers, and other structures.
10. Guardrail system and other items specified by manufacturer.
Aerial Platform Lift Pre-start Inspection Form

The pre-start inspection shall be performed prior to each day’s or shift’s use of the aerial platform lift by an authorized and trained user of the lift.

Check off the items that have been inspected or mark the N/A box if the item does not apply to the lift being inspected. Place any comments in the space provided below. If there are any of these items that are not satisfactory place the lift out of service until the item is corrected.

Lift Provider: __________________________________________

Make of lift:____________ Model of lift: _______________ Serial #: _______________

Inspector’s Name: _________________________________ Date of Inspection: ____________

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<th>Not Okay</th>
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<td>Operational Manual</td>
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<td>Outriggers/Stabilizers</td>
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<td>Guardrail system and locking gate</td>
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<td>Comment:</td>
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Comments: ______________________________________

Inspector’s Signature: __________________________ Date: ____________
Electrical Safety & Lock-out / Tag-out Program

Cirks Construction Inc. has developed the following procedures to protect our employees and reduce the risk of incidents. We will also conduct a periodic review of electrical safety, energy control procedures, and lock-out / tag-out, at least annually, to ensure that the procedure and the requirements of this section are being followed.

This procedure is binding upon all employees. All employees will be instructed in the significance of electrical safety, energy control procedures, and lock-out / tag-out. Each new employee shall be instructed by their supervisor in the purpose and use of these procedures.

All Equipment and Installations

1. Only trained, qualified, and authorized employees will be allowed to make electrical repairs or work on electrical equipment or installations.

2. All electrical equipment and systems shall be treated as energized until tested or otherwise proven to be de-energized.

3. All energized equipment and installations will be de-energized prior to the commencement of any work. If the equipment or installation must be energized for test or other purposes, special precautions will be taken to protect against the hazards of electric shock.

4. All equipment shall be locked out to protect against incidental or inadvertent operation when such operation could cause injury to personnel. Do not attempt to operate any switch, valve, or other energy-isolating device bearing a lock.

5. Safety grounds shall always be used where there is a danger of shock from back feeding or other hazards.

6. Polyester clothing or other flammable types of clothing shall not be worn near electrical circuits. Cotton clothing is much less likely to ignite from arc blast. Employees working on live circuits shall be provided Nomex or equivalent fire resistant clothing.

7. Suitable eye protection must be worn at all times while working on electrical equipment.

8. Always exercise caution when energizing electrical equipment or installations. Take steps to protect employees from arc blast and exploding equipment in the event of a fault.

9. All power tools will be grounded or double insulated. Tools with defective cords or wiring shall not be used.

10. Suitable temporary barriers or barricades shall be installed when access to open enclosures containing exposed energized equipment is not under the control of an authorized person.
Energized Equipment or Systems

Work shall not be performed on exposed energized parts of equipment or systems until the following conditions are met:

1. Responsible supervision has determined that the work is to be performed while the equipment or systems are energized.
2. All work is conducted in accordance with the requirements of NFPA Standard 70E for Electrical Safety.
3. Involved personnel have received instructions on the work techniques and hazards involved in working on energized equipment and appropriate equipment to perform the job has been provided.
4. Suitable personal protective equipment has been provided and is used. Suitable insulated gloves shall be worn for voltages in excess of 300 volts, nominal.
5. Suitable eye protection, including face shield and safety glasses or goggles, has been provided and is used.
6. Suitable arc flash and arc blast protection is provided for high voltage work.
7. Fire resistant clothing such as Nomex suits shall be worn.
8. Where required, suitable barriers, barricades, tags, or signs are in place for personnel protection.

After the required work on an energized system or equipment has been completed, an authorized person shall be responsible for:

1. Removing from the work area any personnel and protective equipment.
2. Reinstalling all permanent barriers or covers.

De-energized Equipment or Systems

A qualified person shall be responsible for completing the following before working on de-energized electrical equipment or systems, unless the equipment is physically removed from the wiring system:

1. Notifying all involved personnel.
2. Locking the disconnecting means in the "open" position with the use of lockable devices, such as padlocks, combination locks, or disconnecting of the conductor(s) or other positive methods or procedures which will effectively prevent unexpected or inadvertent energizing of a designated circuit, equipment, or appliance.
3. Tagging the disconnecting means with suitable incident prevention tags.
4. Effectively blocking the operation or dissipating the energy of all stored energy devices which present a hazard, such as capacitors or pneumatic, spring-loaded and like mechanisms. This may require the installation of safety grounds.

5. Testing the equipment to ensure it is de-energized.

**Energizing (or Re-energizing) Equipment or Systems**

A qualified and authorized person shall be responsible for completing the following before energizing equipment or systems that have been de-energized:

1. Determining that all persons are clear from hazards which might result from the equipment or systems being energized including arc blast or explosions caused by unexpected faults.

2. Removing locking devices and tags. Only the employee who placed them may remove locking devices and tags. Locking devices and tags shall be removed upon completion of the work and after the installation of the protective guards or safety interlock systems.

**Incident Prevention Tags**

Suitable incident prevention tags shall be used to control a specific hazard. Such tags shall provide the following minimum information:

1. Reason for placing tag.

2. Name of person placing the tag and how that person may be contacted.

3. Date tag was placed.

**Lock-out / Tag-out**

Machinery or equipment capable of movement shall be stopped and the power source de-energized or disengaged, and locked out. If necessary, the moveable parts shall be mechanically blocked or secured to prevent inadvertent movement during cleaning, servicing or adjusting operations unless the machinery or equipment must be capable of movement during this period in order to perform the specific task. If so, the hazard of movement shall be minimized.

Equipment or power driven machines equipped with lockable controls, or readily adaptable to lockable controls, shall be locked out or positively sealed in the "off" position during repair work and setting-up operations. In all cases, incident prevention signs or tags shall be placed on the controls of the equipment or machines during repair work.

Cirks Construction Inc. will ensure a competent person provides a sufficient number of incident prevention signs or tags and padlocks, seals, or other similarly effective means that may be required by any reasonably foreseeable repair.
Sequence of Lockout Procedure

1. Notify all affected employees that a lockout is required and the reason therefore.

2. If the equipment is operating, shut it down by the normal stopping procedure (such as: depress stop button, open toggle switch).

3. Operate the switch, valve, or other energy isolating devices so that the energy source(s) (electrical, mechanical, hydraulic, other) is disconnected or isolated from the equipment.

4. Stored energy, such as that in capacitors, springs, elevated machine members, rotating fly wheels, hydraulic systems, and air, gas, steam or water pressure, must also be dissipated or restrained by methods such as grounding, repositioning, blocking, or bleeding down.

5. Lockout energy isolating devices with an assigned individual lock.

6. After ensuring that no personnel are exposed and as a check on having disconnected the energy sources, operate the push button or other normal operating controls to make certain the equipment will not operate. **CAUTION:** Return operating controls to neutral position after the test.

Procedure Involving More Than One Person

If more than one individual is required to lock out equipment, each shall place his or her own personal lock on the energy isolating device(s). One designated individual of a work crew or a supervisor, with the knowledge of the crew, may lock out equipment for the whole crew. In such cases, it may be the responsibility of the individual to carry out all steps of the lockout procedure and inform the crew when it is safe to work on the equipment. Additionally, the designated individual shall not remove a crew lock until it has been verified that all individuals are clear.

Testing Equipment During Lockout

In many maintenance and repair operations, machinery may need to be tested, and for that purpose energized, before additional maintenance work can be performed. This procedure must be followed:

1. Clear all personnel to safety.

2. Clear away tools and materials from equipment.

3. Remove lockout devices and re-energize systems, following the established safe procedure.

4. Proceed with tryout or test.

5. Neutralize all energy sources once again, purge all systems, and lockout prior to continuing work.
Equipment design and performance limitations may dictate that effective alternative worker protection be provided when the established lock-out procedure is not feasible.

Restoring Equipment to Service

After the work is completed and the equipment is ready to be returned to normal operation, this procedure must be followed:

1. Remove all non-essential items.
2. See that all equipment components are operationally intact, including guards and safety devices. Repair or replace defective guards before removing lockouts.
3. Remove each lockout device using the correct removal sequence.
4. Make a visual check before restoring energy to ensure that everyone is physically clear of the equipment.
Driving Safety Policy

Cirks Construction Inc. has established the following guidelines and procedures for our drivers and vehicles to protect the safety of individuals operating any motor vehicle on company business. Protecting our employee drivers, their passengers, and the public is of the highest priority. The commitment of management and employees is critical to the success of this program. Clear communication of, and strict adherence to, the program's guidelines and procedures are essential.

Our primary goal is to maintain a high level of safety awareness and foster responsible driving behavior. Driver safety awareness and responsible driving behavior will significantly decrease the frequency of motor vehicle incidents and reduce the severity of personal injuries and property damage.

Drivers must follow the requirements outlined in this program. Violations of this program may result in disciplinary action up to, and including, suspension of driving privileges or dismissal.

Our program consists of the following elements:

- Driver selection
- Driver training
- Vehicle use policy
- Vehicle inspection and preventive maintenance
- Incident investigation

Driver Selection

Only company authorized and assigned employees are allowed to drive company vehicles. Prior to being authorized and assigned, Cirks Construction Inc. will check for the following items:

- A valid un-restricted driver license.
- A current motor vehicle driving record with no more than 2 points and no serious or major violations.

Cirks Construction Inc. will also check driving records of all employees authorized to drive on company business on an annual basis.

Employees that do not meet these requirements are not authorized or allowed to drive company vehicles or drive their own vehicle on company business.

Driver Training

All employees driving company vehicles and personal vehicles on company business will be given a copy of the Driving Safety Rules and Company Vehicle Use Policy and required to read and sign for them. Safe driving will also be periodically covered at company safety meetings.
Company Vehicle Use Policy

Cirks Construction Inc. has established the following policies pertaining to company vehicles:

1. Only authorized employees may drive Cirks Construction Inc. vehicles.

2. Seat belts must be worn at all times per the law.

3. No employee is permitted to drive Cirks Construction Inc. vehicles while impaired by alcohol, illegal or prescription drugs, or over the counter medications.

4. Employees shall not engage in any activities that distract them from driving while operating vehicles. This includes eating, reading maps, texting, looking for reports or files, and talking on a cell phone without a hands free device.

5. All incidents involving Cirks Construction Inc. vehicles must be reported to the office immediately.

6. Employees with two or more preventable incidents in a three year period or that obtain three points on their driving record, will be subject to a loss of their driving privileges or have their driving privileges restricted.

Vehicle Inspection and Preventive Maintenance

All Cirks Construction Inc. vehicles must be inspected by the driver prior to each use. Mechanical defects will be repaired immediately. The safety director and general superintendent will periodically spot check company vehicles to determine their condition.

Vehicle inspections will include:

- Lights
- Turn signals
- Emergency flashers
- Tires
- Horn
- Brakes
- Fluids
- Windshield condition and wiper condition
- Mirrors

All vehicles will also be maintained in accordance with the manufacturers’ recommendations. It is the responsibility of the individual assigned the vehicle to ensure proper maintenance and repairs are performed. If your vehicle is not safe, do not drive.

Incident Investigation

All incidents in Cirks Construction Inc. vehicles will be investigated by the supervisor, manager or safety director. Where possible, witness statements will be obtained and photos used to document the scene of the incident and the damage. Police reports will also be obtained whenever possible. The following guidelines will be used to help determine preventability.
**Auto Incident Preventability Guide**

This guide will assist in determining whether our driver could have prevented the incident. An incident is preventable if the driver could have done something to avoid it. Drivers are expected to drive defensively. Which driver was primarily at fault, which received a traffic citation, or whether a claim was paid has no bearing on preventability. If there was anything our driver could have done to avoid the collision, then the incident was preventable.

An incident was non-preventable when the vehicle was legally and properly parked or when properly stopped because of a highway patrol officer, a signal, stop sign, or traffic condition. When judging incident preventability, here are some general questions to consider:

1. Does the investigation indicate that the driver considers the rights of others, or is there evidence of poor driving habits that need to be changed?

2. Does the investigation indicate driver awareness? Such phrases as "I did not see," "I didn't think," "I didn't expect," or "I thought" are signals indicating there probably was a lack of awareness and the incident was preventable. An aware driver should think, expect, and see hazardous situations in time to avoid collisions.

3. Was the driver under any physical stresses that could have been contributory? Did the incident happen near the end of a long day or long drive? Did overeating contribute to fatigue? Did the driver get prior sufficient sleep? Is the driver's vision faulty? Was the driver feeling ill?

4. Was the vehicle defective without the driver's knowledge? Was a pre-trip inspection done, and would they have discovered the defect? A car that pulls to the left or right when the driver applies the brakes, faulty windshield wipers, and similar items are excuses, and a driver using them is trying to evade responsibility. Sudden brake failure, loss of steering, or a blowout might be defects beyond the driver's ability to predict. However, pre-trip inspections and regularly scheduled maintenance should prevent most of these problems. If either of these are the cause of the incident, then the incident was probably preventable by the driver.

5. Could the driver have exercised better judgment by taking an alternate route through less congested areas to reduce the hazardous situations encountered?

6. Could the driver have done anything to avoid the incident?

7. Was the driver's speed safe for conditions?

8. Did the driver obey all traffic signals?

9. Was the driver's vehicle under control?

**Intersection Collisions**

Failure of our driver to yield the right-of-way, regardless of who has the right of way, as indicated by stop signs or lights, is preventable. The only exception to this is when the driver is
properly proceeding through an intersection protected by lights or stop signs and the driver's vehicle is struck in the extreme rear side of the vehicle. Regardless of stop signs, stoplights, or right-of-way, a defensive driver recognizes that the right-of-way belongs to anyone who assumes it and should yield accordingly.

Questions to consider:

1. Did the driver approach the intersection at a speed safe for conditions?
2. Was the driver prepared to stop before entering the intersection?
3. At a blind corner, did the driver pull out slowly, ready to apply the brakes?
4. Did the driver look both ways before proceeding through the intersection?

Sideswipes

Sideswipes are often preventable. Defensive drivers do not get into a position where they can be forced into another vehicle or another vehicle can be forced into them. Defensive drivers continuously check for escape routes to avoid sideswipes. For two lane roads, this means a driver should pass another vehicle only when absolutely certain that he or she can safely complete the pass. A driver should also be ready to slow down and let a passing vehicle that has failed to judge safe passing distance back into the lane. A driver should make no sudden moves that may force another vehicle to swerve. If a driver sideswipes a stationary object while taking evasive action to avoid striking another car or a pedestrian, such an incident may not be preventable. However, you should consider what the driver could have done or failed to do immediately preceding the evasive action to be in the position of no other options.

A driver is also expected to anticipate the actions of an oncoming vehicle. Sideswiping an oncoming vehicle is often preventable. Again, evasive action, including leaving the roadway, may be necessary if an oncoming vehicle crosses into the driver's lane. Drivers are expected to allow merging vehicles to merge smoothly with them, and to merge smoothly on controlled access highways. Drivers are expected to be able to gauge distances properly when leaving a parking place and enter traffic smoothly.

Questions to consider:

1. Did the driver look to front and rear for approaching and overtaking traffic immediately before starting to pull away from the curb?
2. Did the driver signal before pulling away from the curb?
3. Did the driver look back rather than depend only upon rear-view mirrors?
4. Did the driver start into traffic only when this action would not require traffic to change its speed or direction in order to avoid his or her vehicle?

Head-on Collisions
A head-on collision with a vehicle traveling in the wrong lane may be preventable if the driver could have pulled off the road or taken other evasive action to prevent a collision. However, the driver should never drive into the other lane to avoid the oncoming vehicle. If the driver swerved off the road to avoid a head-on collision, the incident is non-preventable. The driver in this case made a good defensive driving decision, taking the lesser of two evils.

Many skidding conditions are caused by rain, freezing rain, fog, and snow, which all increase the hazard of travel. Oily road film, which builds up during a period of good weather, causes an especially treacherous condition during the first minutes of a rainfall. Loss of traction can be anticipated, and these incidents usually are preventable. Driving too fast for conditions is the most common reason why these types of incidents are preventable.

Questions to consider:

1. Was the driver operating at a safe speed considering weather and road conditions?
2. During inclement weather, was the driver keeping at least twice the safe following distance used for dry pavement?
3. Were all actions gradual?
4. Was the driver anticipating ice on bridges, in gutters, ruts, and near the curb?
5. Was the driver alert for water, ice, or snow in shaded areas, loose gravel, sand, ruts, etc?

If a driver goes off the road or strikes another vehicle because of skidding, the incident is preventable.

Pedestrian Incidents

All types of pedestrian incidents, including collisions with pedestrians coming from between parked cars, are usually considered preventable. There are few instances where the action of pedestrians is so unreasonable that the operator could not be expected to anticipate such an occurrence.

Questions to consider:

1. Did the driver go through congested areas expecting that pedestrians would step in front of the vehicle?
2. Was the driver prepared to stop?
3. Did the driver keep as much clearance between his or her vehicle and parked vehicles, as safety permitted?
4. Did the driver stop when other vehicles had stopped to allow pedestrians to cross?
5. Did the driver wait for the green light or stop for the caution light?
6. Was the driver aware of children and prepared to stop if one ran into the street?

7. Did the driver give all pedestrians the right-of-way?

8. Did the driver stop for a school bus that was stopped and properly signaling that passengers were loading or unloading?

**Backing Incidents**

Backing a vehicle into another vehicle, an overhead obstruction, or a stationary object is normally preventable. The fact that someone was directing the driver in backing does not relieve the driver of the responsibility to back safely.

**Questions to consider:**

1. Did the driver plan ahead so that he or she could have pulled forward out of the parking space instead of backing?

2. Was it necessary to drive into the narrow street, dead-end alley, or driveway from which he or she backed up?

3. If the driver could not see where he or she was backing: Did the driver try to get someone to guide him or her?

4. Did the driver look all around the vehicle before backing up? Did the driver back up immediately after looking?

5. Did the driver use the horn while backing up? Were the back-up lights working?

6. Did the driver look to the rear without relying totally on the rear-view mirror?

7. If the distance was long, did the driver stop, get out, and look around occasionally?

8. Did the driver back up slowly?

9. Did the driver judge clearances accurately?

**Parking Incidents**

Doors on our driver's parked vehicle that are damaged when opened on the traffic side are considered preventable incidents. The driver is responsible to see that the traffic side is clear of traffic before any doors on that side are opened.

In most cases, if our driver strikes a parked vehicle's opening door while driving, it is considered preventable. Usually our driver can see from a sufficient distance that the parked vehicle is occupied, and should therefore be prepared to stop, move closer to the center line, or change lanes.

It is a driver's responsibility to park the vehicle so that it will remain stationary. A runaway type incident is preventable and blaming such a collision on defective parking brakes or other holding
devices are inadequate excuses. A good pre-trip inspection and maintenance program will eliminate most opportunities for this type of incident being the result of mechanical failure.

Incidents occurring when vehicles are properly and legally parked are considered non-preventable. Incidents occurring while a vehicle is double-parked or in a "No Parking" zone is preventable.

Questions to consider:

1. Was the vehicle parked on the proper side of the road?
2. Was it necessary to park there, or was there a safer only slightly less convenient place nearby?
3. Did the driver have to park on the traveled part of the highway, on the curve, or on the hill?
4. When required, did the driver warn traffic by emergency warning devices?
5. Did the driver park parallel to the curb?
6. Was it necessary to park so close to an alley or directly across from a driveway?

Collision with Obstructions

Obstructions can be avoided if the driver knows the height and width of the vehicle, pays attention to posted clearances, and takes the time to properly judge clearances.

Cargo Incidents

The incident should be considered preventable if the investigation shows a mechanical defect of which the driver was aware, a defect the driver should have found by inspecting the vehicle, or the driver caused the incident by rough and abusive handling. It is a driver's responsibility to secure cargo properly to prevent shifting, loss, or damage. Cargo should be safely stowed to prevent flying objects that can strike or distract the driver.
Driving Safety Rules

Motor vehicle incidents continue to be the leading cause of workplace death in the nation. In 1995 alone, 1,329 workers were killed on the job in auto incidents. That’s one employee death every 7 hours of every day.

Motor vehicle incidents are:*  

- The leading cause of death at work.  
- The leading cause of death for people age 15 to 24.  
- The second most common cause of death for people age 25 to 44.  
- The third most common cause of death for people age 45 to 64.  
- The fifth most common cause of death for all ages behind heart disease, cancer, stroke, and lung disease.

*Source: 1995 statistics from the National Institute of Occupational Safety and Health (NIOSH) and the Bureau of Labor Statistics (BLS).

Fortunately, auto incidents are often preventable. By driving defensively and using good judgment, you can significantly reduce your chances of being hurt or killed in a motor vehicle. The following defensive driving tips are designed to help you avoid incidents and injuries from your fleet operations.

These rules are mandatory for all employees driving Cirks Construction Inc. vehicles:

1. Personal and off duty use of Cirks Construction Inc. vehicles is prohibited.

2. Only authorized employees may drive Cirks Construction Inc. vehicles. No other family members may drive company vehicles.

3. Seat belts must be worn at all times per the law. Hundreds of studies over the years have proven, without a doubt, that seat belts save lives. This is true even in crashes involving fire and water submersion. Properly worn seat belts actually absorb crash forces that; otherwise, would be transferred to your body. If the seat belts in your vehicle are inoperative or defective, have them repaired or replaced immediately. You should wear the lap belt low across your hips and have the shoulder strap directly across your chest. You also need to keep the belt tight. There should not be more than an inch between your body and the belt at any point.

4. No employee is permitted to drive Cirks Construction Inc. vehicles while impaired by alcohol, illegal or prescription drugs, or over the counter medications. The use of drugs or alcohol while driving, or prior to driving, significantly increases your chances of having an incident. It should be at least eight hours from the time you take a drink until operating a vehicle. You should also avoid the use of prescription or over the counter medicines that make you drowsy.

5. All incidents involving Cirks Construction Inc. vehicles must be reported to the office immediately.
6. Employees with two or more preventable incidents in a three year period, or that obtain three points on their driving record, will be subject to a loss of their driving privileges or have their driving privileges restricted.

7. Get the big picture while driving. Keep your eyes aimed high and try to anticipate hazards and other drivers’ mistakes. You should be looking well ahead of where you are. You should also always leave yourself an out in case the other driver does the unexpected.

8. Maintain a safe following distance at all times. Approximately 1/3 of all auto incidents are rear end collisions. You should be at least two seconds behind the vehicle in front of you to allow yourself sufficient time to stop. Do not tailgate. Following distances should be increased for larger vehicles or if in slipper or rainy conditions.

9. Avoid passing on two lane roads. Head on collisions are the most common cause of fatalities. You should also turn on your headlights while driving on two lane roads. This helps oncoming traffic see and avoid you. Never pass another vehicle on blind turns or hills.

10. Inspect the vehicle for mechanical defects prior to each trip. Test your brakes as soon as you start out to insure they are properly operating. Worn tires can make your vehicle difficult to control or stop.

11. Avoid dialing the phone, reading maps, or other distracting activities while driving. These actions take your eyes off the road and often cause you to swerve. Pull over into a safe parking area before making that call.

12. Never drive faster than road conditions warrant. Slow down when road conditions are poor (rain, fog, night) and never exceed posted speed limits.

13. Always signal when changing lanes or turning. Always signal well in advance when changing lanes or turning and make sure to check your blind spot for other vehicles. Also, avoid driving in someone else’s blind spot. If they can’t see you; they don’t know you are there.

14. Use caution when passing any stopped vehicle, especially near intersections or cross walks.

15. Aggressive driving has become a significant problem in the past few years. Don’t do it. Avoid tailgating, rapid lane changes, speeding, and hand gestures to bad drivers. You never know; they may be armed. If you are being tailgated, change lanes and let them pass. It’s really not worth getting killed over.

16. Intersection collisions are also a significant problem. These are often caused by someone running the red light. You should always be under control when approaching an intersection and be prepared to stop if the light changes.

17. Slow down and look for trains at all railroad crossings. Even with modern signals and gates, hundreds of cars are hit by trains each year at grade crossings.
18. Use your low beams while driving in fog and slow down. If you can’t see, pull over into a safe parking area and wait for better visibility. Do not stop in the traffic lanes. You will almost certainly be hit by another vehicle if you do.

19. Always walk behind the vehicle before backing. This will insure that there are no people or objects behind you that you cannot see from the driver’s seat. You should also make sure that all loads are properly secured to prevent them from moving. Numerous incidents are caused by objects that have fallen off company vehicles.

20. Yield the right of way until you are sure the other driver is going to stop. Just because you have the legal right of way doesn’t mean you should always take it. Always yield the right of way to emergency vehicles.

Defensive Drivers

- Expect the unexpected.
- Anticipate bad driving by others.
- Look ahead for hazards.
- Always leave themselves an out.
- Always drive under control.
- Obey the rules of the road.
Driving Safety Rules - Company Vehicle Policy Receipt

This is to certify that I have received a copy of the Cirks Construction Inc. Driving Safety Rules and Company Vehicle Policy. I have read these instructions, understand them, and will comply with them while driving company vehicles.

I also understand that I am to report any incident (no matter how minor) to the office immediately.

I understand that failure to abide by these rules will result in disciplinary action and possible suspension of my driving privileges, which may prevent my ability to continue employment for Cirks Construction Inc.

Print Name: ___________________________ Date: ___________________________

Signature: _____________________________________________________________________

Copy: Employee File
**Confined Space Operations**

Occasionally in our work, we may encounter confined spaces. Confined space work requires special safety precautions to ensure that employees are not overcome by dangerous air contaminants or oxygen deficiency. In some cases, there may be fire or explosion hazards in confined spaces that do not exist in open areas. Many workers have been killed or seriously injured in confined spaces. To avoid this, Cirks Construction Inc. employees must adhere to the following rules. This section prescribes minimum standards for preventing employee exposure to dangerous air contamination or oxygen deficiency in confined spaces. In some cases, extra precautions may be necessary. As always, if you are unsure ask for assistance.

**Definitions**

A confined space has the following properties:

1. Existing ventilation is insufficient to remove dangerous air contamination or oxygen deficiency that may exist or develop.

2. Ready access or egress for the removal of a suddenly disabled employee is difficult due to the location or size of the opening(s).

3. The area is not designed for continuous human occupancy.

4. One means of access and egress.

**Dangerous air contamination** means an atmosphere presenting a threat of causing death, injury, acute illness, or disablement due to the presence of flammable or explosive, toxic, or otherwise injurious or incapacitating substances.

Dangerous air contamination due to the **flammability** of a gas or vapor is defined as an atmosphere containing the gas or vapor at a concentration greater than 20 percent of its lower explosive (lower flammable) limit (LEL).

Dangerous air contamination due to a **combustible particulate** is defined as a concentration greater than 20 percent of the minimum explosive concentration of the particulate.

Dangerous air contamination due to the **toxicity** of a substance is defined as the atmospheric concentration immediately hazardous to life or health. This definition of dangerous air contamination due to the toxicity of a substance does not preclude the requirement to control harmful exposures to toxic substances at concentrations less than those immediately hazardous to health or life.

**Oxygen deficiency** is an atmosphere containing oxygen at a concentration of less than 19.5 percent by volume.

**Oxygen rich** is an atmosphere containing oxygen at a concentration of more than 22 percent by volume. This creates additional fire hazards.
Typical Confined Spaces

- Vaults
- Pits
- Tubs
- Vats
- Ducts
- Boilers
- Silos
- Sewers
- Compartments

Prior to Confined Space Entry

1. Written understandable operating and rescue procedures shall be developed and shall be provided to affected employees via a detailed job hazard analysis. The operating procedures shall include provision for the surveillance of the surrounding area to avoid hazards such as drifting vapors from tanks, piping, and sewers.

2. All employees, including standby persons if needed, will be trained in the operating and rescue procedures, including instructions as to the hazards they may encounter.

3. Any lines, pipes, or hoses which may convey flammable, injurious, or incapacitating substances into the space shall be disconnected, blinded, or blocked off by other positive means to prevent the development of dangerous air contamination or oxygen deficiency within the space. The disconnection or blind shall be located or done in such a manner that inadvertent reconnection of the line or removal of the blind is effectively prevented.

4. The space shall be emptied, flushed, or otherwise purged of flammable, injurious, or incapacitating substances to the extent feasible.

5. The air shall be tested with an appropriate device or method to determine whether dangerous air contamination or an oxygen deficiency exists and a written record of such testing results shall be made and kept at the work site for the duration of the work. Affected employees or their representative shall be afforded an opportunity to review and record the testing results.

6. Where interconnected spaces are blinded off as a unit, each space shall be tested and the results recorded. The most hazardous condition found shall govern the entry procedures to be followed.

Confined Space Entry if Tests Show No Hazard

If dangerous air contamination or oxygen deficiency does not exist within the space, as demonstrated by tests performed in accordance with the pre-entry procedures, entry into and work within the space may proceed subject to the following provisions:
1. Air testing, in accordance with the pre-entry procedures, shall be conducted with sufficient frequency to ensure that the development of dangerous air contamination or oxygen deficiency does not occur during the performance of any operation.

2. Work stops, employees exit, and additional precautions are taken if dangerous air contamination or oxygen deficiency does develop.

Confined Space Entry if Tests Show Hazards are Present or are Likely to Develop

Where the existence of dangerous air contamination or oxygen deficiency is demonstrated by tests performed in accordance with the pre-entry procedures or if the development of dangerous air contamination or an oxygen deficiency is imminent, the following requirements shall also apply:

1. Existing ventilation shall be augmented by appropriate means.

2. When additional ventilation has removed dangerous air contamination or oxygen deficiency as demonstrated by additional testing conducted (and recorded), entry into and work within the space may proceed.

3. No source of ignition shall be introduced until the implementation of appropriate provisions of this section have ensured that dangerous air contamination due to flammable or explosive substances does not exist.

4. Whenever oxygen-consuming equipment such as welding torches, furnaces, and the like are to be used, measures shall be taken to ensure adequate combustion air and exhaust gas venting.

5. To the extent feasible, provision shall be made to permit ready entry and exit.

6. Where it is not feasible to provide for ready exit from spaces equipped with automatic fire suppression systems employing harmful design concentrations of toxic or oxygen-displacing gases, or total foam flooding, such systems shall be deactivated. Where it is not practical or safe to deactivate such systems, the use of respiratory protective equipment, such as a Self-Contained Breathing Apparatus (SCBA), shall apply during entry into and work within such spaces.

Confined Spaces Where Dangerous Air Contamination Cannot be Removed by Ventilation

It is the policy of Cirks Construction Inc. to only work in a confined space if it can be made safe by the means listed above. We will not work in confined spaces where there is an ongoing hazard of air contamination or oxygen deficiency. These operations require extra measures and precautions beyond our immediate ability to perform.
Company Policy for Permit-Required Confined Spaces

The superintendent and the safety director will identify permit-required confined spaces in our company’s workplaces. Employees will be required to obtain a permit to enter or work in those spaces. Prior to entry, the superintendent and the safety director will assess the conditions and hazards, and decide if workers will enter a permit space. The superintendent and the safety director will be responsible for testing and monitoring atmospheric conditions as required. Procedures will be initiated to eliminate or control the hazards in the space including, but not limited to, the following:

• Specifying acceptable entry conditions.
• Providing each authorized entrant or that employee’s authorized representative with the opportunity to observe any monitoring or testing of permit spaces.
• Isolating the permit space.
• Purging, flushing, or ventilating the permit space as necessary to eliminate or control atmospheric hazards.
• Providing pedestrian, vehicle, or other barriers as necessary to eliminate or control atmospheric hazards.
• Re-evaluating or verifying that conditions in the permit space are acceptable for entry throughout the duration of an authorized entry. Employees and their representatives are entitled to request additional monitoring at any time.
• Canceling entry permits once the work is completed, or conditions change, so that occupation of the confined space is no longer safe.

Cirks Construction Inc. will provide and maintain the following equipment at no cost to employees, and ensure that employees use the equipment properly:

• Testing and monitoring equipment required for atmospheric conditions
• Ventilating equipment
• Communications equipment
• Personal protective equipment where engineering controls do not eliminate hazards, or threat of hazards
• Lighting equipment
• Barriers and shields as required
• Equipment, such as ladders, needed for safe ingress and egress by authorized entrants
• Rescue and emergency equipment, except to the extent that the equipment is provided by rescue services
• Any other equipment necessary for safe entry into and rescue from permit spaces
An attendant will be designated for each area for the purpose of testing and monitoring conditions and personnel anytime employees are assigned to confined spaces. Personnel involved in a confined space activities will be designated as attendant, entry supervisor, or authorized entrant, and assigned specific duties relating to confined entry procedures as follows:

Authorized attendants are those who monitor entrants’ activities from outside the space. Attendants have the following duties and responsibilities:

- Knowing the permit-space hazards, including the symptoms and consequences of exposure.
- Knowing how many entrants are in permit space.
- Staying out of the space during entry operations.
- Keeping in contact with entrants.
- Ordering an evacuation for hazardous condition.
- Keeping unauthorized persons away from the space.
- Activating rescue procedures.

Authorized entrants are those permitted by an employer to enter a permit space. Entrants have the following duties and responsibilities:

- Knowing the permit-space hazards, including the symptoms and consequences of exposure.
- Using equipment properly.
- Communicating regularly with the attendant.
- Notifying the attendant immediately of hazardous conditions.
- Leaving the space immediately during a hazardous condition or when the attendant orders an evacuation.

The entry supervisor makes sure attendants and entrants follow entry-permit procedures. The entry supervisor is responsible for the following:

- Knowing the permit-space hazards, including the symptoms and consequences of exposure.
- Verifying that the entry permit is accurate and current.
- Stopping entry operations and canceling the entry permit when permit-space work is done or during a hazardous condition.
- Ensuring that responders will be available in an emergency.
- Removing any unauthorized person who enters the space.
- Ensuring that entry operations are consistent if another authorized person must replace an attendant or an entrant.

Prior to beginning any work at a new job-site, the superintendent and the safety director will verify the closest emergency medical and rescue service’s ability to respond to a confined
space emergency. The number for the verified emergency service will be prominently posted on the permit at the permit entry portal. In the event of an emergency requiring emergency service response, the assigned attendant will notify the entry supervisor who is responsible for contacting emergency services.

This service will be determined by the superintendent and the safety director to be qualified to provide emergency requiring emergency rescue and medical services in the event of a confined space emergency. The attendant will remain on station to assist in evacuating the space and prevent the entry of unauthorized rescue personnel.

Cirks Construction Inc. will evaluate a prospective rescue and emergency service’s ability to respond to a rescue summons in a timely manner, considering the hazard(s) identified. What will be considered timely will vary according to specific hazard(s) identified and will vary accordingly to the specific hazards involved in each entry. For example, §1910.134, Respiratory Protection, requires that standby person(s) be provided that are capable of immediate action to rescue employee(s) wearing respiratory protection while in work areas defined as IDLH at atmospheres.

The superintendent and the safety director will evaluate a prospective rescue service’s ability, in terms of proficiency with rescue-related tasks and equipment, to function appropriately while rescuing entrants from the particulate permit space or types of permit spaces identified. The superintendent and the safety director will select a rescue team or service from those evaluated that:

- Has the capability to reach the victim(s) within a time frame that is appropriate for the permit space hazard(s) identified.
- Is equipped for and trained in performing the needed rescue services.

The superintendent and the safety director will inform each rescue team or service of the hazards they may confront when called on to perform rescue at the site. The superintendent and the safety director will provide the rescue team or service selected with access to all permit spaces from which rescue may be necessary so that the rescue service can develop appropriate rescue plans and proactive rescue operations.

Cirks Construction Inc. employees who have been designated to provide permit space rescue and emergency services will be instructed in and adhere to the following measures:

- The superintendent and the safety director will provide affected employees with the personal protective equipment (PPE) needed to conduct permit space rescues safely and train affected employees so they are proficient in the use of that PPE, at no cost to those employees.
- The superintendent and the safety director will train affected employees to perform assigned rescue duties and ensure that such employees successfully complete the training required to establish proficiency as an authorized entrant.
- The superintendent and the safety director will train affected employees in basic first-aid and cardiopulmonary resuscitation (CPR) and will ensure that at least one member of the rescue team or service holding a current certification in first aid and CPR is available.
To facilitate non-entry rescue, retrieval systems or methods will be used whenever an authorized entrant enters a permit space, unless the retrieval equipment would increase the overall risk of entry or would not contribute to the rescue of the entrant. Retrieval systems will meet the following requirements:

- Each authorized entrant will use a chest or full body harness, with a retrieval line attached at the center of the entrant’s back, above the entrant’s head, or at another point which presents a profile small enough for the successful removal of the entrant.

- The other end of the retrieval line will be attached to a mechanical device or fixed point outside the permit space in such a manner that rescue can begin as soon as the rescuer becomes aware that rescue is necessary. A mechanical device will be available to retrieve personnel from vertical type permit spaces more than 5 feet deep.

If an injured entrant is exposed to a substance to which a Material Safety Data Sheet (MSDS) or other similar written information is required to be kept at the work site, that MSDS or written information will be made available to the medical facility treating the exposed entrant.

In the event that an IDLH (Immediately Dangerous to Life and Health) entry is deemed necessary, the superintendent and the safety director will first contact the designated emergency response service, and ensure that emergency service is available on site before allowing entry into the confined space.

The assigned entry supervisor will be responsible for providing first aid where necessary after contacting emergency services. No employee will enter a permit-required confined space without first completing an entry permit and having the entry supervisor sign the permit. The steps of the entry-permit procedure include the following:

- Obtain an entry permit prior to entering the space.
- Accomplish all pre-permit activities required for entering the space, including atmospheric testing, controlling hazards, having required equipment on hand, and providing for emergency services.
- Complete all items on the entry permit.
- Have the entry supervisor authorize and sign the permit. If any item on the permit is checked “NO” (meaning not yet completed or available), the permit will not be signed.
- Attach a copy of the entry permit outside the entry portal of the confined space. Keep it there until the entry operations are completed and the supervisor cancels the permit.
- Proceed with entry operations.

Atmospheric monitoring will be performed regularly during confined space operations to ensure that conditions do not exist, or change, to threaten employee safety. Ventilation of confined spaces is required before entry, during monitoring and throughout the operation. Monitoring or re-evaluation of conditions may be requested at any time during the operation by any employee,
or employee representative, who suspects that changes have occurred which might present a hazard to personnel.

All proposed entrants, attendants, and entry supervisors will participate in the review of the initial atmospheric monitoring, and the completion and review of the entry permit. Procedures for coordination entry operations for multiple employers working simultaneously as authorized entrants in a permit space, so that employees of one employer do not endanger the employees of any other employer include the following:

- When Cirks Construction Inc. makes arrangements to have another contractor perform work that involves permit space entry, Cirks Construction Inc. will:
- Inform the contractor that the workplace contains permit spaces and that permit space entry is allowed only through compliance with Cirks Construction Inc. permit space program.
- Apprise the contractor of the elements, including the hazards identified and Cirks Construction Inc. experience with the space, which make the space in question a permit space.
- Apprise the contractor of any precautions or procedures that Cirks Construction Inc. has implemented for the protection of employees in or near permit spaces where contractor personnel will be working.
- Coordinate entry operations with the contractor, when our Cirks Construction Inc. personnel and the contractor's personnel will be working in or near permit spaces.
- Debrief the contractor at the conclusion of the entry operations regarding any hazards confronted or created in permit spaces during entry operations.

In addition to complying with the permit space requirements that apply to Cirks Construction Inc., each contractor who is retained to perform permit space entry operations will:

- Obtain any available information regarding permit space hazards and entry operations from Cirks Construction Inc. entry supervisor.
- Coordinate entry operations with the entry supervisor, when both Cirks Construction Inc. personnel and the contractor's personnel will be working in or near permit spaces. Inform Cirks Construction Inc. entry supervisor of any hazards confronted or created in permit spaces.
- Inform Cirks Construction Inc. entry supervisor of any hazards confronted or created in permit spaces, either during the entry operation or through a debriefing.

If more than one confined space is to be monitored by a single attendant, the means and procedures that will be used in order to enable the attendant to respond to emergencies in one or more permit spaces that he/she is monitoring work include:

- Continuously maintains an accurate count of authorization entrants in the permit spaces and ensures that the means used to identify authorized entrants accurately identifies who is in the permit space.
• Remains outside the permit spaces during entry operations until relieved by another attendant.

• Communicates with authorized entrants as necessary to monitor entrant status and to alert entrants of the need to evacuate the space.

• Monitors activities inside and outside the space to determine if it is safe for entrants to remain in the space. Orders the authorized entrants to evacuate the permit spaces immediately under any of the following conditions if the attendant:
  
  o Detects a prohibited condition.
  
  o Detects the behavioral effects of hazard exposure in an authorized entrant.
  
  o Detects a situation outside the spaces that could endanger the authorized entrants.
  
  o Cannot effectively and safely perform all the duties required.
  
  o Summon rescue and other emergency services as soon as the attendant determines that authorized entrants may need assistance to escape from permit space hazards.
  
  o Performs no duties that might interfere with the attendant’s primary duty to monitor and protect the authorized entrants.

Multiple confined space entry operations will be under the direct control of the entry supervisor, who will be available on site. The entry supervisor:

• Verifies that rescue services are available and that the means for summoning them are operable.

• Verifies, by checking that the appropriate entries have been made on the permit, that all tests specified by the permit have been conducted, and that all procedures and equipment specified by the permit are in place before endorsing the permit and allowing entry to begin.

• Knows the hazards that may be faced during entry, including information on the mode, signs or symptoms, and consequences of the exposure.

• Determines, whenever responsibility for a permit space entry operation is transferred, and at intervals dictated by the hazards and operations performed within the space, that entry operations remain consistent with terms of the permit and that acceptable entry conditions are maintained.

• Removes unauthorized individuals who enter or who attempt to enter the permit space during entry operations.

• Terminates the entry and cancels the permit as required.

The superintendent and the safety director will have the authority to cancel an entry permit upon completion of the assigned task, upon finding unsuitable conditions or preparation, or if unsuitable conditions develop. The entry supervisor will ensure that all personnel have exited the space, that equipment, tools, and materials have been removed, and that no condition which might create a hazard has been left unresolved. The entry supervisor will then mark the permit
cancelled, sign the space provided for cancellation, and present the cancelled permit to the superintendent and the safety director for filing in records.

The Permit Required Confined Space Program will be reviewed in the event of an incident/injury, near miss, if employee complains, or at least annually using the cancelled entry permits as reference. Revisions will be made to the program as necessary to ensure the safety of our employees.
Respiratory Protection

Occasionally our work may necessitate the use of respirators to protect against air contaminants. Due to the limitations of respirators and their uncomfortable nature, Cirks Construction Inc. will make every effort to provide other means of protection, such as local exhaust ventilation, or substitution of less hazardous material, prior to requiring employees to wear them.

When it is clearly impractical to remove harmful dusts, fumes, mists, vapors, or gases at their source, or where emergency protection against occasional or relatively brief exposure is needed, Cirks Construction Inc. will provide, and the employee exposed to such hazard shall use, approved respiratory equipment.

Whenever respirators are required to be used to control harmful exposures, only respiratory equipment approved for that purpose shall be used and such equipment shall be approved by the National Institute for Occupational Safety and Health (NIOSH). Only parts approved for the specific respirator system shall be used for replacement.

General Respiratory Protection Guidelines

1. Atmospheric contamination will be prevented wherever feasible through engineering controls such as enclosure or confinement of the operation, general and local exhaust ventilation, or substitution of less toxic materials. When effective engineering controls are not feasible, or while they are being instituted, appropriate respirators shall be used.

2. Cirks Construction Inc. shall identify and evaluate the respiratory hazard(s) in the workplace; this evaluation shall include a reasonable estimate of employee exposures to respiratory hazard(s) and an identification of the contaminant's chemical state and physical form. Where we cannot identify or reasonably estimate the employee exposure, the atmosphere shall be considered to be Immediately Dangerous to Life or Health (IDLH).

3. Respirators shall be provided when such equipment is necessary to protect the health of the employee.

4. Only NIOSH-certified respirators shall be used. The respirator shall be used in compliance with the conditions of its certification.

5. Cirks Construction Inc. will provide respirators that are applicable and suitable for the purpose intended. The Company shall select and provide an appropriate respirator based on the respiratory hazard(s) to which the worker is exposed and workplace and user factors that affect respirator performance and reliability.

6. Respirators shall be selected from a sufficient number of respirator models and sizes so that the respirator is acceptable to, and correctly fits, the user.

7. The safety director shall act as the Program Administrator who is qualified by appropriate training or experience that is commensurate with the complexity of the program to administer or oversee the respiratory protection program and conduct the required evaluations of program effectiveness.
8. Cirks Construction Inc. will provide respirators, training, and medical evaluations at no cost to the employee.

9. Cirks Construction Inc. will provide a medical evaluation to determine the employee’s ability to use a respirator, before the employee is fit tested or required to use the respirator in the workplace. We may discontinue an employee's medical evaluations when the employee is no longer required to use a respirator.

10. Cirks Construction Inc. will ensure that employees using tight-fitting face-piece respirators pass an appropriate Qualitative Fit Test (QLFT) or Quantitative Fit Test (QNFT).

11. Cirks Construction Inc. will establish and implement procedures for the proper use of respirators. These requirements include prohibiting conditions that may result in face-piece seal leakage, preventing employees from removing respirators in hazardous environments, taking actions to ensure continued effective respirator operation throughout the work shift, and establishing procedures for the use of respirators in IDLH atmospheres.

12. We shall provide each respirator user with a respirator that is clean, sanitary, and in good working order. The supervisor or manager shall ensure that respirators are cleaned and disinfected.

13. All filters, cartridges, and canisters used in the workplace must be legibly labeled and color-coded with the National Institute for Occupational Safety and Health (NIOSH) approval label that must not be removed.

14. Training and information will be provided to employees who are required to use respirators. The training will be comprehensive, understandable, and recur annually or more often if necessary.

15. The safety director shall conduct evaluations of the workplace to ensure that the written respiratory protection program is being properly implemented, and to consult with employees to ensure that they are using the respirators properly.

16. Written information regarding medical evaluations, fit testing, and the respirator program shall be retained indefinitely. This information will facilitate employee involvement in the respirator program, assist us in auditing the adequacy of the program, and provide a record for compliance determinations by OSHA.

17. Where respirator use is not required by a particular standard or hazard, Cirks Construction Inc. may provide respirators at the request of employees or permit employees to use their own respirators if we determine that such respirator use will not in itself create a hazard. If voluntary respirator use is permissible, we shall provide the respirator users with the information contained in Appendix D of section 5144 8CCR; (Information for Employees Using Respirators When Not Required Under the Standard). If employees choose to wear a dust mask, no medical evaluation or further training will be required. If they request to wear a respirator, even though it is not required, they will be included in the standard medical screening, fit testing, and training program.
Respirator Selection Requirements

The proper respirator for the job and hazard shall be selected. This selection will be made in accordance with CAL-OSHA or ANSI Z88.2-1980 standards. The correct respirator shall be specified for each job. The individual issuing them shall be adequately instructed to insure that the correct respirator is used.

The manufacturers’ recommendations and literature will also be reviewed to determine if the respirator provides protection against the expected contaminants. For instance; dust masks do not provide protection against gasses or vapors.

The safety director or another qualified individual shall review and approve all breathing air compressors and installations for compliance with appropriate OSHA regulations and safety procedures prior to use.

Respirators for Immediately Dangerous to Life or Health (IDLH) Atmospheres

Cirks Construction Inc. shall provide the following respirators for employee use in IDLH atmospheres:

- A full face-piece pressure demand SCBA certified by NIOSH for a minimum service life of thirty minutes, or
- A combination full face-piece pressure demand Supplied Air Respirator (SAR) with auxiliary self-contained air supply.
- Respirators provided only for escape from IDLH atmospheres shall be NIOSH-certified for escape from the atmosphere in which they will be used.
- All oxygen-deficient atmospheres shall be considered IDLH.

Respirators for Atmospheres that are not IDLH

Cirks Construction Inc. shall provide a respirator that is adequate to protect the health of the employee and ensure compliance with all other OSHA statutory and regulatory requirements under routine and reasonably foreseeable emergency situations. The respirator selected shall be appropriate for the chemical state and physical form of the contaminant.

For protection against gases and vapors;

- An atmosphere-supplying respirator, or
- An air-purifying respirator, provided that the respirator is equipped with an End-of-Service-Life Indicator (ESLI) certified by NIOSH for the contaminant; or if there is no ESLI appropriate for conditions in the workplace, we will implement a change schedule for canisters and cartridges that is based on objective information or data that will ensure that canisters and cartridges are changed before the end of their service life.

For protection against particulates;
• An atmosphere-supplying respirator; or
• An air-purifying respirator equipped with a filter certified by NIOSH under 30 CFR part 11 as a high efficiency particulate air (HEPA) filter, or an air-purifying respirator equipped with a filter certified for particulates by NIOSH under 42 CFR part 84; or
• For contaminants consisting primarily of particles with Mass Median Aerodynamic Diameters (MMAD) of at least 2 micrometers, an air-purifying respirator equipped with any filter certified for particulates by NIOSH.

Medical Evaluation Procedures

1. Employees shall not be assigned to tasks requiring the use of respirators unless it has been determined that they are physically able to perform the work while using the required respiratory equipment.

2. Cirks Construction Inc. shall identify a Physician or Other Licensed Health Care Professional (PLHCP) to perform medical evaluations.

3. The medical evaluation shall include any medical tests, consultations, or diagnostic procedures that the PLHCP deems necessary to make a final determination.

4. Medical questionnaires and examinations shall be administered confidentially during the employee's normal working hours or at a time and place convenient to the employee.

5. The employee shall have an opportunity to discuss the examination results with the PLHCP.

6. The following information must be provided to the PLHCP before the PLHCP makes a recommendation concerning an employee's ability to use a respirator:
   • The type and weight of the respirator to be used by the employee;
   • The duration and frequency of respirator use (including use for rescue and escape);
   • The expected physical work effort;
   • Additional protective clothing and equipment to be worn; and
   • Temperature and humidity extremes that may be encountered.

7. Cirks Construction Inc. shall provide the PLHCP with a copy of this written respiratory protection program and a copy of the OSHA regulations if they do not already have them.

8. In determining the employee's ability to use a respirator, Cirks Construction Inc. shall obtain a written recommendation regarding the employee's ability to use the respirator from the PLHCP. The recommendation shall provide only the following information:
• Any limitations on respirator use related to the medical condition of the employee, or relating to the workplace conditions in which the respirator will be used, including whether or not the employee is medically able to use the respirator;
• The need, if any, for follow-up medical evaluations; and
• A statement that the PLHCP has provided the employee with a copy of the PLHCP’s written recommendation.

9. If the respirator is a negative pressure respirator and the PLHCP finds a medical condition that may place the employee's health at increased risk if the respirator is used, Cirks Construction Inc. shall provide a Powered Air Purifying Respirator (PAPR) if the PLHCP’s medical evaluation finds that the employee can use such a respirator; if a subsequent medical evaluation finds that the employee is medically able to use a negative pressure respirator, then we are no longer required to provide a PAPR.

10. Cirks Construction Inc. shall provide additional medical evaluations that comply with the requirements of this section if:
• An employee reports medical signs or symptoms that are related to ability to use a respirator;
• A PLHCP, supervisor, or the respirator program administrator informs the employer that an employee needs to be reevaluated;
• Information from the respiratory protection program, including observations made during fit testing and program evaluation, indicates a need for employee reevaluation; or
• A change occurs in workplace conditions (e.g., physical work effort, protective clothing, and temperature) that may result in a substantial increase in the physiological burden placed on an employee.

Fit Testing

1. Cirks Construction Inc. shall ensure that an employee using a tight-fitting face-piece respirator is fit tested prior to initial use of the respirator, whenever a different respirator face-piece (size, style, model or make) is used, and at least annually thereafter.

2. We shall conduct an additional fit test whenever the employee reports, or the employer, PLHCP, supervisor, or program administrator makes visual observations of, changes in the employee's physical condition that could affect respirator fit. Such conditions include, but are not limited to, facial scarring, dental changes, cosmetic surgery, or an obvious change in body weight.

3. If after passing a QLFT or QNFT, the employee subsequently notifies the program administrator, supervisor, or PLHCP that the fit of the respirator is unacceptable, the employee shall be given a reasonable opportunity to select a different respirator face-piece and to be retested.

4. The fit test shall be administered using an OSHA-accepted QLFT or QNFT protocol.
Usage Rules

1. Cirks Construction Inc. shall not permit respirators with tight-fitting face-pieces to be worn by employees who have:
   - Facial hair that comes between the sealing surface of the face-piece and the face or that interferes with valve function; or
   - Any condition that interferes with the face-to-face-piece seal or valve function.

2. If an employee wears corrective glasses or goggles or other personal protective equipment, we shall ensure that such equipment is worn in a manner that does not interfere with the seal of the face-piece to the face of the user.

3. For all tight-fitting respirators, we shall ensure that employees perform a user seal check each time they put on the respirator.

4. Appropriate surveillance shall be maintained of work area conditions and degree of employee exposure or stress. When there is a change in work area conditions or degree of employee exposure or stress that may affect respirator effectiveness, we shall reevaluate the continued effectiveness of the respirator.

5. Respiratory equipment shall not be passed on from one person to another until it has been cleaned and sanitized. Respirators individually assigned should be marked to indicate to whom it was assigned. This mark shall not affect the respirator performance in any way. The date of issuance should be recorded.

6. When not in use, respirators shall be stored to protect against dust, sunlight, extreme temperatures, excessive moisture, or damaging chemicals. Plastic zip lock bags are suitable for storage.

7. Cirks Construction Inc. shall ensure that employees leave the respirator use area:
   - To wash their faces and respirator face-pieces as necessary to prevent eye or skin irritation associated with respirator use; or
   - If they detect vapor or gas breakthrough, changes in breathing resistance, or leakage of the face-piece; or
   - To replace the respirator or the filter, cartridge, or canister elements.

8. If the employee detects vapor or gas breakthrough, changes in breathing resistance, or leakage of the face-piece, we will replace or repair the respirator before allowing the employee to return to the work area.

Maintenance, Inspection, and Care of Respirators

1. The employer shall ensure that respirators are cleaned and disinfected using procedures recommended by the respirator manufacturer, provided that such procedures are of
equivalent effectiveness to OSHA regulations. The respirators shall be cleaned and disinfected at the following intervals:

- Respirators issued for the exclusive use of an employee shall be cleaned and disinfected as often as necessary to be maintained in a sanitary condition;
- Respirators issued to more than one employee shall be cleaned and disinfected before being worn by different individuals;
- Respirators maintained for emergency use shall be cleaned and disinfected after each use; and
- Respirators used in fit testing and training shall be cleaned and disinfected after each use.

2. All respirators shall be stored to protect them from damage, contamination, dust, sunlight, extreme temperatures, excessive moisture, and damaging chemicals, and they shall be packed or stored to prevent deformation of the face-piece and exhalation valve.

3. Emergency respirators shall be:

- Kept accessible to the work area;
- Stored in compartments or in covers that are clearly marked as containing emergency respirators; and
- Stored in accordance with any applicable manufacturer instructions.

4. All respirators used in routine situations shall be inspected before each use and during cleaning.

5. All respirators maintained for use in emergency situations shall be inspected at least monthly and in accordance with the manufacturer's recommendations, and shall be checked for proper function before and after each use.

6. Emergency escape-only respirators shall be inspected before being carried into the workplace for use.

7. Cirks Construction Inc. shall ensure that respirator inspections include the following:

- A check of respirator function, tightness of connections, and the condition of the various parts including, but not limited to, the face-piece, head straps, valves, connecting tube, and cartridges, canisters or filters.
- A check of elastomeric parts for pliability and signs of deterioration.

8. In addition to the requirements above, self-contained breathing apparatus shall be inspected monthly.

9. Air and oxygen cylinders shall be maintained in a fully charged state and shall be recharged when the pressure falls to 90% of the manufacturer's recommended pressure.
level. The employer shall determine that the regulator and warning devices function properly.

10. For respirators maintained for emergency use, Cirks Construction Inc. shall:

- Certify the respirator by documenting the date the inspection was performed, the name (or signature) of the person who made the inspection, the findings, required remedial action, and a serial number or other means of identifying the inspected respirator.
- Provide this information on a tag or label that is attached to the storage compartment for the respirator, is kept with the respirator, or is included in inspection reports stored as paper or electronic files. This information shall be maintained until replaced following a subsequent certification.

11. For repairs, Cirks Construction Inc. shall ensure that respirators that fail an inspection or are otherwise found to be defective are removed from service, and are discarded or repaired or adjusted in accordance with the following procedures:

- Repairs or adjustments to respirators are to be made only by persons appropriately trained to perform such operations and shall use only the respirator manufacturer's NIOSH-approved parts designed for the respirator.
- Repairs shall be made according to the manufacturer’s recommendations and specifications for the type and extent of repairs to be performed.
- Reducing and admission valves, regulators, and alarms shall be adjusted or repaired only by the manufacturer or a technician trained by the manufacturer.

Training

1. Cirks Construction Inc. shall ensure that each employee required to use a respirator can demonstrate knowledge of at least the following:

- Why the respirator is necessary and how improper fit, usage, or maintenance can compromise the protective effect of the respirator.
- What the limitations and capabilities of the respirator are.
- How to use the respirator effectively in emergency situations, including situations in which the respirator malfunctions.
- How to inspect, put on and remove, use, and check the seals of the respirator.
- What the procedures are for maintenance and storage of the respirator.
- How to recognize medical signs and symptoms that may limit or prevent the effective use of respirators.

2. The training shall be conducted in a manner that is understandable to the employee.
3. The training shall be provided prior to requiring the employee to use a respirator in the workplace.

4. Retraining shall be administered annually, and when the following situations occur:
   - Changes in the workplace or the type of respirator render previous training obsolete.
   - Inadequacies in the employee's knowledge or use of the respirator indicate that the employee has not retained the requisite understanding or skill.
   - Any other situation arises in which retraining appears necessary to ensure safe respirator use.

5. The basic advisory information on respirators, as presented in Appendix D of Section 5144 of the California Code of Regulations (8CCR~5144), shall be provided to employees who wear respirators when such use is not required by this section or by the employer.

**Program Evaluation**

1. The safety director shall conduct evaluations of the workplace as necessary to ensure that the provisions of the current written program are being effectively implemented and that it continues to be effective.

2. The safety director and site superintendent shall regularly consult employees required to use respirators to assess the employees' views on program effectiveness and to identify any problems. Any problems that are identified during this assessment shall be corrected. Factors to be assessed include, but are not limited to:
   - Respirator fit (including the ability to use the respirator without interfering with effective workplace performance).
   - Appropriate respirator selection for the hazards to which the employee is exposed.
   - Proper respirator use under the workplace conditions the employee encounters.
   - Proper respirator maintenance.

**Recordkeeping**

1. Records of medical evaluations must be retained and made available in accordance with section 3204 (8CCR~3204).

2. Cirks Construction Inc. shall establish a record of the qualitative and quantitative fit tests administered to an employee including:
   - The name or identification of the employee tested.
   - Type of fit test performed.
• Specific make, model, style, and size of respirator tested.
• Date of test.
• The pass/fail results for QLFTs or the fit factor and strip chart recording or other recording of the test results for QNFTs.
• Fit test records shall be retained for respirator users until the next fit test is administered.

3. Program records will be retained in the Cirks Construction Inc. Human Resources department and shall be made available upon request to affected employees and to the Chief of the Division of Occupational Safety and Health or designee for examination and copying.

Procedures for Cleaning Respirators

1. Remove filters, cartridges, or canisters. Disassemble face-pieces by removing speaking diaphragms, demand and pressure-demand valve assemblies, hoses, or any components recommended by the manufacturer. Discard and replace any defective parts.

2. Wash components in warm [43 deg. C (110 deg. F) maximum] water with a mild detergent or with a cleaner recommended by the manufacturer. A stiff bristle (not wire) brush may be used to facilitate the removal of dirt.

3. Rinse components thoroughly in clean, warm [43 deg. C (110 deg. F) maximum], preferably running water and drain.

4. When the cleaner used does not contain a disinfecting agent, respirator components should be immersed for two minutes in one of the following:
   • Hypochlorite solution (50 ppm of chlorine) made by adding approximately one milliliter of laundry bleach to one liter of water at 43 deg. C (110 deg. F).
   • Aqueous solution of iodine (50 ppm iodine) made by adding approximately 0.8 milliliters of tincture of iodine (6-8 grams ammonium or potassium iodide/100 cc of 45% alcohol) to one liter of water at 43 deg. C (110 deg. F).
   • Other commercially available cleansers of equivalent disinfectant quality when used as directed, if their use is recommended, or approved by the respirator manufacturer.

5. Rinse components thoroughly in clean, warm [43 deg. C (110 deg. F) maximum], preferably running water and drain. The importance of thorough rinsing cannot be overemphasized. Detergents or disinfectants that dry on face-pieces may result in dermatitis. In addition, some disinfectants may cause deterioration of rubber or corrosion of metal parts if not completely removed.

6. Components should be hand-dried with a clean lint-free cloth or air-dried.

7. Reassemble face-piece, replacing filters, cartridges, and canisters where necessary.
8. Test the respirator to ensure that all components work properly.

**Information for Employees Using Respirators When Not Required**

Respirators are an effective method of protection against designated hazards when properly selected and worn. Respirator use is encouraged, even when exposures are below the exposure limit, to provide an additional level of comfort and protection for workers. However, if a respirator is used improperly or not kept clean, the respirator itself can become a hazard to the worker. Sometimes, workers may wear respirators to avoid exposures to hazards, even if the amount of hazardous substance does not exceed the limits set by OSHA standards. If your employer provides respirators for your voluntary use, or if you provide your own respirator, you need to take certain precautions to be sure that the respirator itself does not present a hazard. You should do the following:

1. Read and heed all instructions provided by the manufacturer on use, maintenance, cleaning, care, and warnings regarding the respirators limitations.

2. Choose respirators certified for use to protect against the contaminant of concern. NIOSH, the National Institute for Occupational Safety and Health of the U.S. Department of Health and Human Services, certifies respirators. A label or statement of certification should appear on the respirator or respirator packaging. It will tell you what the respirator is designed for and how much it will protect you.

3. Do not wear your respirator into atmospheres containing contaminants for which your respirator is not designed to protect against. For example, a respirator designed to filter dust particles will not protect you against gases, vapors, or very small solid particles of fumes or smoke.

4. Keep track of your respirator so that you do not mistakenly use someone else's respirator.
Ergonomics

Studies have shown over the years that poorly designed and arranged work areas, awkward work postures, and repetitive motions can lead to a variety of injuries including carpal tunnel syndrome and tendonitis, which are often referred to as Repetitive Motion Injuries (RMIs). As with cancer, heart disease, and many other ailments, there are risk factors that increase an individual's likelihood of developing RMIs. If the risk factors are reduced, so are the chances of being injured. While some of these risk factors, such as family history, cannot be controlled in the employment setting, many can. Including:

- The force used to perform a task.
- Posture while performing tasks.
- The number of repetitions performed in a given time period.
- Mechanical stresses such as hard surfaces.

Cirks Construction Inc. has developed the following program designed to minimize RMIs. The program includes worksite evaluations, control of exposures that have caused RMIs, and training of employees.

Worksite Evaluation and Exposure Reduction

Each job, process, or operation of identical work activity that has resulted in at least two RMIs or a representative number of such jobs, processes, or operations shall be evaluated for exposures that have caused RMIs. Cirks Construction Inc. may request assistance from outside consultants for this purpose.

Any exposures that have caused RMIs shall, in a timely manner, be corrected or if not capable of being corrected have the exposures minimized to the extent feasible. We shall consider engineering controls, such as work station redesign, adjustable fixtures or tool redesign, and administrative controls, such as job rotation, work pacing, or work breaks.

Training

Affected employees shall be provided training that includes an explanation of:

- Cirks Construction Inc. program.
- The exposures which have been associated with RMIs.
- The symptoms and consequences of injuries caused by repetitive motion.
- The importance of reporting symptoms and injuries to their supervisor.
- Methods used to minimize RMIs.

This training may be conducted as part of the regular safety meetings.
Forklifts

Each year about 100 workers are killed and almost 95,000 injured in industrial truck incidents across the country. To properly protect our employees from such incidents, Cirks Construction Inc. has adopted the following Forklift Safety Program.

General

Cirks Construction Inc. will ensure that each powered industrial truck operator is competent to operate a powered industrial truck safely, as demonstrated by the successful completion of the training and evaluation specified below.

Prior to permitting an employee to operate a powered industrial truck (except for training purposes), Cirks Construction Inc. shall ensure that the employee has successfully completed a training program.

Training Program Implementation

Trainees may operate a powered industrial truck only:

- Under the direct supervision of persons who have the knowledge, training, and experience to train operators and evaluate their competence.
- Where such operation does not endanger the trainee or other employees.

Training shall consist of a combination of formal instruction (e.g., lecture, discussion, interactive computer learning, video, and written material), practical training (demonstrations performed by the trainer and practical exercises performed by the trainee), and evaluation of the operator's performance in the workplace.

All operator training and evaluation shall be conducted by persons who have the knowledge, training, and experience to train powered industrial truck operators and evaluate their competence.

*Note: This section does not require that the training be given by any particular individual or organization. The trainer must only be able to demonstrate that they have appropriate knowledge, training, and experience to train others and evaluate their competence.*

Training Program Content

Powered industrial truck operators shall receive initial training in the following topics:

- Operating instructions, warnings, and precautions for the types of truck the operator will be authorized to operate.
- Differences between the truck and the automobile.
- Truck controls and instrumentation: where they are located, what they do, and how they work.
- Engine or motor operation.
• Steering and maneuvering.
• Visibility (including restrictions due to loading).
• Fork and attachment adaptation, operation, and use limitations.
• Vehicle capacity.
• Vehicle stability.
• Any vehicle inspection and maintenance that the operator will be required to perform.
• Refueling or charging and recharging of batteries.
• Operating limitations.
• Any other operating instructions, warnings, or precautions listed in the operator's manual for the types of vehicle that the employee is being trained to operate.
• Workplace-related topics.
• Surface conditions where the vehicle will be operated.
• Composition of loads to be carried and load stability.
• Load manipulation, stacking, and unstacking.
• Pedestrian traffic in areas where the vehicle will be operated.
• Narrow aisles and other restricted places where the vehicle will be operated.
• Hazardous locations where the vehicle will be operated.
• Ramps and other sloped surfaces that could affect the vehicle's stability.
• Closed environments and other areas where insufficient ventilation or poor vehicle maintenance could cause a buildup of carbon monoxide or diesel exhaust.
• Other unique or potentially hazardous environmental conditions in the workplace that could affect safe operation.
• The requirements of this section.

Refresher Training and Evaluation

Refresher training, including an evaluation of the effectiveness of that training, shall be conducted to ensure that the operator has the knowledge and skills needed to operate the powered industrial truck safely.

Refresher training in relevant topics shall be provided to the operator when:

• The operator has been observed to operate the vehicle in an unsafe manner.
• The operator has been involved in an incident or near-miss incident.
• The operator has received an evaluation that reveals that the operator is not operating the truck safely.
• The operator is assigned to drive a different type of truck.
• A condition in the workplace changes in a manner that could affect safe operation of the truck.

An evaluation of each powered industrial truck operator's performance shall be conducted at least once every three years.

Avoidance of Duplicative Training

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

Note: This section reduces the training requirement for previously trained operators provided we can demonstrate that the operator knows the material. Since some of the required training is unique to the area where the lift will be operated, we must still cover these areas even if the employee was previously trained.

Certification

Cirks Construction Inc. shall certify that each operator has been trained and evaluated as required by this paragraph. The certification shall include the name of the operator, the date of the training, the date of the evaluation, and the identity of the person(s) performing the training or evaluation.
Fire Prevention and Emergency Action Plan

Cirks Construction Inc. has developed the following emergency plan to cover those designated actions that must be taken to ensure employee safety from fire and during other emergencies.

Office, Shop, and Warehouse Emergency Evacuation and Fire Prevention

The safety director is responsible for ensuring the following:

1. That all required emergency exits are clearly identified in the office, shop, and warehouse and that all required firefighting and emergency equipment is available and in good condition.

   The following items will be maintained:
   - First aid kit
   - Drinking water
   - Flashlight
   - Portable battery powered radio and batteries
   - Fire extinguishers
   - Wrench to shut off the main gas valve
   - Pry bars, axes, saws, tools, or similar devices for employee rescue

2. Creating a facility map designating all emergency evacuation routes and the locations of all firefighting equipment and emergency supplies and equipment. These maps will be posted in at least two locations in the facility.

3. Training all exposed employees on the procedures to be followed in the event of fire, earthquake, or other emergency including how to properly notify other affected employees.

4. Identifying potential fire hazards in the office, shop, and warehouse and ensuring that adequate steps are taken to prevent fires.

5. Ensuring that combustible trash and materials are removed promptly from the facility, and that all flammable and combustible liquids are properly stored and handled.

During an Emergency

In the event of an emergency such as earthquake or fire, all employees are expected to evacuate the premises immediately.

Employees will be notified of emergencies through one of the following:
   - Fire alarm
   - Intercom
   - Emergency horn
   - Direct voice communication
After the emergency evacuation has been completed, a head count will be taken to ensure everyone is out of the building.

**Fire Prevention in Shops and Warehouses**

The following procedures will be used to prevent fires in shops and warehouses:

1. All accumulated combustible trash and debris will be removed as soon as practical.

2. Flammable liquids will only be stored and dispensed from UL approved safety containers designed for that purpose.

3. All rags soaked with flammable or combustible liquids will be properly stored in closed metal containers.

4. Appropriate precautions will be taken to prevent fires when torch cutting, welding, or soldering.

5. Compressed gas cylinders containing flammable or explosive gasses will be properly stored in the upright position with their caps on and protected from heat or puncture. Fuel gas and oxygen shall be separated at least 20 feet when stored.

6. Smoking or open lights are prohibited within 50 feet of flammable liquid or gas storage and dispensing areas.

7. Flammable solvents will not be used for cleaning purposes.

8. A fire extinguisher, rated not less than 2A, shall be provided for each 3,000 square feet of the floor area, or fraction thereof. Where the floor area is less than 3,000 square feet, at least one extinguisher shall be provided.

9. Travel distance from any point of the protected area to the nearest fire extinguisher shall not exceed 75 feet.

10. At least one fire extinguisher, rated not less than 2A, shall be provided on each floor. In multi-story buildings, at least one fire extinguisher shall be located adjacent to the stairway at each floor level.

11. A fire extinguisher, rated not less than 10B, shall be provided within 50 feet of wherever more than 5 gallons of flammable or combustible liquids or 5 pounds of flammable gas are being used on the job site. This requirement does not apply to the integral fuel tanks of motor vehicles.

12. Portable fire extinguishers shall be inspected monthly, or at more frequent intervals by the employer, and serviced at least annually by a person licensed or registered by the State Fire Marshal.

**NOTE:** Inspection is a "quick check" that an extinguisher is available and will operate. It is intended to give reasonable assurance that the extinguisher is fully charged and operable. This is done by seeing that it is in its designated place, that it has not been
actuated or tampered with, and that there is no obvious or physical damage or condition to prevent operation.

13. Suitable fire control devices, such as portable fire extinguishers, shall be available at locations where flammable or combustible liquids are stored.

14. At least one portable fire extinguisher, having a rating of not less than 20-B units, shall be located outside of, but not more than 10 feet from, the door opening into any room used for flammable liquid storage.

15. At least one portable fire extinguisher, having a rating of not less than 20-B units, shall be located not less than 25 feet, nor more than 75 feet, from any flammable liquid storage area located outside.
Office Safety

Office incidents can and do happen. To prevent them, Cirks Construction Inc. has developed the following rules for our office staff. We will also endeavor to include office employees in periodic safety meetings. If at any time, you feel there is a safety hazard, or you have any safety concerns, please do not hesitate to notify your supervisor or call the safety director.

1. Report all incidents and injuries, no matter how minor, to your supervisor immediately.
2. Correct or report any safety hazards that you observe.
3. Clean up any spilled material that may present a slipping hazard.
4. Do not stretch any cords across aisles that may present a tripping hazard.
5. No one is allowed to climb on shelves or stand on chairs; you must use a step stool or ladder.
6. Keep all legs of the chair on the floor. Do not tilt chairs too far back.
7. No one shall be in the possession of, or under the influence of, alcohol or controlled substances while on the premises.
8. No horseplay will be tolerated.
10. Do not open more than one file drawer at a time. This could cause the cabinet to tip.
11. Do not store heavy objects above your head that could fall on you in an earthquake.
12. Do not store flammable or combustible materials near heaters or other heat sources.
13. If you are unsure how to do any task safely, ask your supervisor.
14. Do not operate any equipment you are not trained and authorized to use.
15. Always follow safe lifting procedures when lifting any object and get help for heavy loads:
   - Bend your knees, not your back.
   - Keep the load close to body.
   - Keep your back straight.
   - Lift with your legs.
   - Do not lift and twist.
Heat Illness Prevention

Heat illness is a serious medical condition that results when a worker’s body becomes overheated from working in areas with high temperatures. This often occurs with individuals working in outdoor environments such as construction. Heat illness can occur at any time but is a greater concern when day time temperatures exceed 80 degrees. Heat illness includes heat cramps, fainting, heat exhaustion, and heatstroke. Workers have died or suffered serious health problems from these conditions. Heat illness can be prevented and that is the policy of Cirks Construction Inc.

1. Provision of water. All employees shall have access to potable and cool drinking water at all times. Where drinking water is not plumbed or otherwise continuously supplied, it shall be provided in sufficient quantity at the beginning of the work shift to provide one quart per employee per hour for drinking for the entire shift. Employers may begin the shift with smaller quantities of water if they have effective procedures for replenishment during the shift as needed to allow employees to drink one quart or more per hour. The frequent drinking of water shall be encouraged.

2. Employees shall be allowed and encouraged to take a cool-down rest in the shade for a period of no less than five minutes at a time when they feel the need to do so to protect themselves from overheating. Such access to shade shall be permitted at all times.

3. Access to shade. Shade areas shall be provided on all jobsites. This may include buildings, trailers, or other structures. If no such structures are available, portable canopies or similar structures will be used to provide a shaded area for employees. Cooling measures other than shade (e.g., use of misting machines) may be provided in lieu of shade if the foreman can demonstrate that these measures are at least as effective as shade in allowing employees to cool. Employees may request to use these areas at any time if they need a respite from heat and sun.

4. When the outdoor temperature in the work area exceeds 80 degrees Fahrenheit, the employer shall have and maintain one or more areas with shade at all times while employees are present that are either open to the air or provided with ventilation or cooling. The amount of shade present shall be at least enough to accommodate 100% of the employees on the shift at any time, so that they can sit in a normal posture fully in the shade without having to be in physical contact with each other. The shaded area shall be located as close as practicable to the areas where employees are working.

5. High-heat procedures. Cirks Construction Inc. shall implement high-heat procedures when the temperature equals or exceeds 95 degrees Fahrenheit. These procedures shall include the following to the extent practicable:

   - Ensuring that effective communication by voice, observation, or electronic means is maintained so that employees at the work site can contact a supervisor when necessary. An electronic device, such as a cell phone or text messaging device, may be used for this purpose only if reception in the area is reliable.
   - Observing employees for alertness and signs or symptoms of heat illness.
   - Reminding employees throughout the work shift to drink one quart per employee per hour, lasting the entire shift.
• Close supervision of a new employee by a supervisor or designee for the first 14 days of the employee's employment by the employer, unless the employee indicates at the time of hire that he or she has been doing similar outdoor work for at least 10 of the past 30 days for 4 or more hours per day.

6. Training. Effective training in the following topics shall be provided to each supervisory and non-supervisory employee before the employee begins work that should reasonably be anticipated to result in exposure to the risk of heat illness:

• The environmental and personal risk factors for heat illness, as well as the added burden of heat load on the body caused by exertion, clothing, and personal protective equipment.
• Cirks Construction Inc. procedures for complying with the requirements of this standard.
• The importance of frequent consumption of small quantities of water, up to 4 cups per hour, when the work environment is hot and employees are likely to be sweating more than usual in the performance of their duties.
• New acclimation procedures include closely observing all employees during a heat wave—defined as at least 80 degrees, or anytime the temperature is 10 degrees higher than the average high daily temperature in the preceding five days—and closely observing new workers for their first two weeks on the job.
• The different types of heat illness and the common signs and symptoms of heat illness.
• The importance to employees of immediately reporting to the employer, directly or through the employee's supervisor, symptoms or signs of heat illness in themselves, or in co-workers.
• The employer's procedures for responding to symptoms of possible heat illness, including how emergency medical services will be provided should they become necessary.
• The employer's procedures for contacting emergency medical services, and if necessary, for transporting employees to a point where they can be reached by an emergency medical service provider.
• The employer's procedures for ensuring that, in the event of an emergency, clear and precise directions to the work site can and will be provided as needed to emergency responders. These procedures shall include designating a person to be available to ensure that emergency procedures are invoked when appropriate.

7. Supervisor training. Prior to supervising employees performing work that should reasonably be anticipated to result in exposure to the risk of heat illness effective training on the following topics shall be provided to the supervisor:

• The information required to be provided by section 6 above.
• The procedures the supervisor is to follow to implement the applicable provisions in this section.
• The procedures the supervisor is to follow when an employee exhibits symptoms consistent with possible heat illness, including emergency response procedures.
• How to monitor weather reports and how to respond to hot weather advisories.
**Code of Safe Practices – Job Site Rules**

1. All employees and all visitors must wear hard hats and safety vests at all times while on jobsite. *(Exceptions can be made by superintendents ONLY)*

2. All visitors must check in with jobsite supervisor immediately.

3. Access to the site is restricted to employees and those authorized by Cirks Construction Inc.

4. Use or possession of intoxicants, alcohol, or drugs is strictly prohibited.

5. Maintain good housekeeping; help keep the jobsite clean orderly.

6. Long pants and shirts with a minimum of 4” sleeves are to be worn at all times.

7. Work boots; no tennis shoes are to be worn.

8. Eye, ear, and respiratory protection devices must be worn at all times when required.

9. PFAS and correct fall protection measures shall be used when exposed to a 6ft. fall or greater.

10. Radios or earphones are only permitted on site if they don’t interfere with communication.

11. Only authorized personnel are permitted to operate equipment.

12. No riders are allowed on machinery or equipment; riders in trucks are to remain seated while vehicle is moving.

13. All machinery must have operable backup alarms at all times.

14. No one shall enter a trench or excavation site unless it is properly shored or sloped.

15. For excavations 5ft. in depth or greater an Excavation Permit must be completed and approved by the superintendent or the safety director.

16. All power tools and extension cords with defects will be removed from site. All safety guards must be in place.

17. All ladders must be properly secured. Maintain 3 points of contact at all times.

18. Safety rails must be maintained at all times in all openings, stairways, and at the building perimeter.

19. Horseplay is strictly prohibited.

20. All incidents and unsafe conditions or practices must be reported immediately to Cirks Construction Inc. project superintendent.
21. All work on any type of scaffold must have a JHA prior to work commencing.

22. Follow instructions. Do not take chances. If you do not know, ASK.
Code of Safe Practices – General Safety Rules

1. All persons shall follow this Code of Safe Practices and render every possible aid to safe operations.

2. Failure to abide by the Code of Safe Practices may result in disciplinary action up to and including termination.

3. Immediately report any unsafe conditions, incidents, injuries, or illness to your supervisor or manager.

4. If you are unsure of the safe method to do your job, STOP and ask your supervisor. Ignorance is no excuse for a safety violation.

5. No one shall be knowingly permitted to work while the employee's ability or alertness is impaired by fatigue, illness, and prescription or over the counter drugs. Employees who are suspected of being under the influence of illegal or intoxicating substances, impaired by fatigue or an illness, shall be prohibited from working.

6. Never work while under the influence of an illegal or intoxicating substance, fatigued, or ill.

7. Anyone known to be under the influence of any drugs or intoxicating substances which impair the employee's ability to safely perform the assigned duties shall not be allowed on the job.

8. Horseplay, scuffling, fighting, and other acts that tend to have an adverse influence on the safety or well-being of the employees are prohibited.

9. Work shall be well planned and supervised to prevent injuries in the handling of materials and in working together with equipment.

10. Keep your work area clean, free of debris, electrical cords, and other hazards.

11. Immediately clean up spilled liquids.

12. Always notify all other individuals in your area who might be endangered by the work you are doing.

13. Do not operate equipment that you are not familiar with. Do not attempt to use such equipment until you are fully trained and authorized.

14. You are responsible for ensuring all safety guards are operable and in place. If they are not, STOP working and tell your supervisor.

15. Never bring firearms, weapons, illegal drugs, or alcoholic beverages on company or customer property or the job site.

16. A red tag system identifies equipment that is NOT to be operated, energized, or used. All lock-out or tag-out notices and procedures must be observed and obeyed.
17. Do not block exits, fire doors, aisles, fire extinguishers, first aid kits, emergency equipment, electrical panels, or traffic lanes.

18. Do not leave tools, materials, or other objects on the floor that might cause others to trip and fall.

19. Do not run on the work site, in the shop, or the office area.

20. Do not distract others while working. If conversation is necessary, make sure eye contact is made prior to communicating.

21. Employees shall not enter manholes, underground vaults, chambers, tanks, silos, or other similar places that receive little ventilation, unless it has been determined that it is safe to enter.

22. Employees shall ensure that all guards and other protective devices are in proper places and adjusted, and shall report deficiencies promptly to the supervisor or manager.

23. Materials, tools, or other objects shall not be thrown from buildings or structures until proper precautions are taken to protect others from the falling objects.

24. Employees shall cleanse thoroughly after handling hazardous substances and follow special instructions from authorized sources.

25. Gasoline or other flammable liquids shall not be used for cleaning purposes.

26. No burning, welding, or other source of ignition shall be applied to any enclosed tank or vessel, even if there are some openings, until it has first been determined that no possibility of explosion exists and authority for the work is obtained from the supervisor or manager.
**Code of Safe Practices – Electrical Safety**

1. Only trained, qualified, and authorized employees are allowed to make electrical repairs or work on electrical equipment or installations.

2. All electrical equipment and systems shall be treated as energized until tested or otherwise proven to be de-energized.

3. All energized equipment and installations will be de-energized prior to the commencement of any work. If the equipment or installation must be energized for test or other purposes, special precautions will be taken to protect against the hazards of electric shock.

4. All equipment shall be locked out to protect against incidental or inadvertent operation when such operation could cause injury to personnel. Do not attempt to operate any switch, valve, or other energy-isolating device bearing a lock.

5. Safety grounds shall always be used where there is a danger of shock from back feeding or other hazards.

6. Polyester clothing or other flammable types of clothing shall not be worn near electrical circuits. Cotton clothing is much less likely to ignite from arc blast. Employees working on live circuits shall be provided Nomex or equivalent fire resistant clothing.

7. Suitable eye protection must be worn at all times while working on electrical equipment.

8. Always exercise caution when energizing electrical equipment or installations. Take steps to protect yourself and other employees from arc blast and exploding equipment in the event of a fault.

9. All power tools will be grounded or double insulated. Tools with defective cords or wiring shall not be used.

10. Metal jewelry should not be worn around energized circuits.

11. Extension and temporary power cords must be heavy duty and grounded. Frayed or defective cords shall not be used.

12. Electrical installations must be protected from incidental contact by enclosures or tight fitting covers.

13. Circuits shall not be overloaded with equipment or extension cords.

**Lock-out / Tag-out**

1. All machinery and electrical equipment shall be locked out and tagged prior to repair, cleaning, or adjustment unless power is necessary to perform the work. If so, other precautions, specified by your supervisor, will be taken.

2. Use your own lock and key. No one else should have a key for your lock. Destroy all
duplicate keys.

3. Maintain control of your key at all times to prevent unauthorized use.

4. Never remove another employee’s lock or energize tagged equipment.

5. If multiple employees are working on the same equipment, each employee should install their own lock.

6. Notify all affected employees that a lock-out/tag-out is required and the reasons for it.

7. If the equipment is operating, shut it down by the normal stopping procedure (depress stop button, open toggle switch, etc.).

8. Operate the switch, valve, or other energy isolating devices so that the energy source(s) (electrical, mechanical, hydraulic, etc.) is disconnected or isolated from the equipment.

9. Stored energy, such as that in capacitors, springs, elevated machine members, rotating flywheels, hydraulic systems, and air, gas or water pressure, etc. must also be dissipated or restrained by methods such as grounding, repositioning, blocking, bleeding down, etc.

10. Lock-out all energy isolation devices with an individual lock.

11. After ensuring that no employees are exposed and as a check of having disconnected the energy sources, operate the push button or other normal operating controls to make certain the equipment will not operate. **Caution: Return operating controls to neutral position after the test.**

12. The equipment is now locked-out. Install red lock-out tag on operating controls.

13. After repair is complete and the equipment is ready for testing or normal operation, check the equipment to see that all cover plates and safety devices have been reinstated.

14. When the equipment is clear, remove all locks and tags. The energy isolating devices may be operated to restore energy to the equipment.
**Code of Safe Practices – Company Vehicles**

1. Only authorized employees are permitted to operate company vehicles. Do not let anyone else drive your company vehicle unless authorized.

2. Drive defensively and obey all traffic and highway laws.

3. Always wear your seat belt, whether you are a driver or a passenger.

4. Report all incidents as soon as possible to your supervisor and obtain a police report.

5. Keys must be removed from all unattended vehicles and the vehicles must be locked, unless parking inside the facility.

6. Do not jump from the cab or bed of company vehicles. Always use the stairs or a ladder.

7. Inspect your vehicle and report any defects or operating problems to your supervisor so that repairs can be made.

8. No smoking while refueling.

9. Smoking is prohibited in company vehicles.

10. If your driver's license is revoked or expired, immediately notify your supervisor and do not drive.

11. Employees shall not engage in any activities that distract them from driving while operating vehicles. This includes eating, reading maps, texting, looking for reports or files, and talking on a cell phone without a hands free device.
**Code of Safe Practices – Ladder Safety**

1. Inspect the ladder before using it. If it is broken, throw it out. Never repair a broken ladder, get a new one. Keep portable stairways, ladders and step stools in good condition and use them only in a safe manner.

2. Use the proper ladder for the job. Do not use “A” frame ladders as straight ladders. Make sure the ladder is tall enough to reach the work area. Do not use metal ladders for electrical work.

3. Do not place ladders in passageways, doorways, or any location where they might be hit or jarred, unless protected by barricades or guards.

4. Ladders should only be placed on hard level surfaces. Make sure the ladder feet are not placed on sandy, slippery, or sloping surfaces. Clean or sweep the area where the ladder feet will be and make sure the rubber feet are in good shape.

5. Ladder rungs and steps must be kept free of grease, oil, mud, or other slippery substances.

6. Arrange your work so you are able to face the ladder and use both hands while climbing. Do not carry tools or equipment while climbing a ladder. Climb the ladder, and then hoist the tools or equipment with a line or a hoisting device.

7. Avoid temporary ladders. Always use a commercially made, construction grade ladder of the proper length for the work being performed.

8. Secure portable ladders in place and at a pitch so the leveling indicator is in alignment or the distance from the wall to the base of the ladder is at least 1’ for every 4’ of height.

9. Straight ladders shall be tied off the top of the ladder to prevent slipping.

10. Be aware of objects below you, move or cover sharp objects in case you fall.

11. Do not stand on or work from the 2nd rung from the top or above. Also, do not reach too far from the ladder. Keep your belt buckle between the side rails.

12. Extension ladders shall extend at least 36" above the level being accessed.

13. On all ladders, do not step on cross bracing that is not intended to be used for climbing.

14. All manufacturers’ safety labels must be legible.
**Code of Safe Practices – Personal Protective Equipment (PPE)**

1. Use the correct PPE for each job assignment. If you don’t know, ask.

2. PPE shall be maintained in good condition and cleaned regularly.

3. PPE shall be stored properly when not in use to protect it from damage.

4. Damaged or broken PPE must be returned to your supervisor for replacement.

5. Hard hats must be worn on job sites at all times.

6. ANSI approved safety glasses must be worn when working with power tools, compressed air or gasses, chemicals, or any other item that creates an eye injury hazard.

7. Face shields with safety glasses are recommended when grinding or working with hazardous chemicals.

8. Employees must wear industrial work shoes in the warehouse and on the job site. The shoes must have complete leather uppers and skid resistant soles and be in good condition. Steel toe or composite toe protection is recommended.

9. Athletic style shoes, tennis shoes, open toe shoes, plastic or vinyl shoes, or shoes with decorative accessories are not allowed.

10. Hearing protectors must be worn when working with loud equipment such as cut off saws, chain saws, air hammers, or grinders.

11. Be sure the protective clothing you wear will not hamper or restrict freedom of movement due to improper fit.

12. Long pants of heavy-duty material must be worn. No shorts or sweat pants are allowed.

13. Do not wear loose, torn or frayed clothing, dangling ties, finger rings, dangling earrings, jewelry items, or long hair unless contained in a hair net, while operating any machine that could cause entanglement.

14. If required, wear approved respiratory protection when applying adhesives, paint, welding, grinding, or working with chemicals. Read the SDS to find out which types of respirators are required. Facial hair may not be permitted in certain circumstances.
Code of Safe Practices – Hand and Power Tools

1. Proper eye protection must be worn when using hand and power tools.

2. Know your hand and power tool applications and limitations. Always use the proper tool for the job.

3. Inspect cords and tools prior to use. Do not use tools that are faulty in any way. Exchange them for safe tools immediately.

4. Power tools must be grounded or double insulated. All power tools are to be plugged into a grounded GFCI outlet.

5. Do not use power tools in damp, wet, or explosive atmospheres.

6. Do not lift, lower, or carry portable electrical tools by the power cord.

7. Keep all safety guards in place and in proper working order.

8. Use clamps or vises to secure work pieces.

9. Do not force hand power tools. Apply only enough pressure to keep the unit operating smoothly.

10. Return all tools and other equipment to their proper place after use.

11. Unplug all power tools before changing bits or grinding disks.


13. Do not use a screwdriver as a chisel.

14. Before using sledges, axes, or hammers, be sure the handles are securely fastened with a wedge made of sound material.

15. Do not use a handle extension on any wrench.

16. Files should be equipped with handles and should not be used as a punch or pry.

1. Read all warning labels and Safety Data Sheets (SDS) before using any chemicals. SDS includes personal protective equipment and safety information. SDS are available from your supervisor.

2. Hazardous materials shall be handled in accordance with the SDS and label. If protective equipment is required, use it.

3. Eye protection must be worn when working with hazardous materials or chemicals.

4. Mixing of chemicals is prohibited at all times unless required by the label. Before you mix - review all SDS.

5. Always wash your hands thoroughly after handling chemicals and before eating or smoking, even if you were wearing protective gloves.

6. Never use solvents for hand cleaning. Use the non-toxic hand cleaners provided.

7. Store all hazardous materials properly in suitable containers that are properly labeled.

8. Use chemicals only in well-ventilated areas.

9. When using secondary containers, ensure that they are labeled as to their contents and hazards.

10. Do not disturb any asbestos. STOP work and tell your supervisor. If you are not sure, STOP and ask.

11. Do not cut or weld stainless steel or galvanized metal without respiratory protection. These items create toxic fumes.

12. Work with lead, asbestos, cadmium, and other toxic compounds require special precautions. Do not attempt to perform this work without special equipment and training.
1. Always take precautions to prevent fires which may be started, particularly from oily waste, rags, gasoline, flammable liquids, acetylene torches, improperly installed electrical equipment, and trash.

2. Firefighting equipment is to be inspected on a regular basis. All discharged, damaged, or missing equipment is to be immediately reported to a supervisor. Tampering with fire equipment is prohibited.

3. Access to fire extinguishers must be kept clear at all times. Make note of the location of firefighting equipment in your work area.

4. Never use gasoline or flammable solvents for cleaning purposes.

5. Smoking is prohibited within 50 feet of where flammable substances are present.

6. In case of fire, employees shall consider the safety of themselves and other individuals before saving property.

7. Keep your work areas free of debris. Remove useless material from the work area as fast as required to help reduce tripping hazards.

8. Maintain awareness of potential hazards when walking about the work site.

9. Keep tools, materials, and equipment out of walkways and stairways at all times.

10. Sharp wires or protruding nails must be kept bent.
**Code of Safe Practices – Traffic Safety**

1. All employees exposed to traffic hazards are required to wear orange flagging garments (shirts, vests, or jackets) at all times.

2. When possible, company vehicles are to be placed between the employees and traffic to prevent vehicles from entering the work area and hitting members of the crew.

3. All traffic controls will be established in accordance with the State of California Manual of Traffic Controls for Construction and Maintenance Work Zones.

4. Traffic controls are to be properly maintained throughout the workday. Signs and cones must be kept upright, visible, and in their proper position at all times.
**Code of Safe Practices – Welding and Cutting**

1. Make sure your welding equipment is installed properly, grounded, and in good working condition.

2. Always wear protective clothing suitable for the welding or cutting to be done.

3. Always wear #5 eye protection while welding, brazing, soldering, or flame cutting. Once you remove your welding helmet, put on safety glasses.

4. Keep your work area clean and free of hazards. Make sure that no flammable, volatile, or explosive materials are in or near the work area.

5. Handle all compressed gas cylinders with extreme care. Keep caps on when not in use. Make sure that all compressed gas cylinders are secured to the equipment carriage, wall, or other structural supports. When compressed gas cylinders are empty close the valve, install the cap, and return to correct bottle storage area.

6. Store compressed gas cylinders in a safe place with good ventilation. Acetylene cylinders and oxygen cylinders should be kept at least 20 feet apart.

7. Do not weld or cut in confined spaces without special precautions and your supervisor’s authorization.

8. Do not weld on containers that have held combustibles or flammable materials.

9. Use mechanical exhaust ventilation at the point of welding when welding lead, cadmium, chromium, manganese, brass, bronze, zinc, or galvanized metals. These metals are highly toxic and their fumes should not be breathed.

10. Make sure all electrical connections are tight and insulated. Do not use cables with frayed, cracked, or bare spots in the insulation.

11. When the electrode holder or cutting torch is not in use, hang it on the brackets provided. Never let it touch a compressed gas cylinder.

12. Dispose of electrode and wire stubs in proper containers since stubs and rods on the floor are a safety hazard.

13. Use weld curtains to shield others from the light rays produced by your welding.

14. Make sure all compressed gas connections are tight and check for leaks. Do not use hoses with frayed or cracked spots.

15. Keep your leads orderly and out of walkways. Suspend them whenever possible.

16. **DO NOT WELD** if leads or machine are in or near water.

17. Make sure a portable fire extinguisher is nearby.

18. Keep your work area clean and free of hazards. When flame cutting, sparks can travel...
30-40 feet. Do not allow flame cut sparks to hit hoses, regulators, or cylinders.

19. Use oxygen and acetylene or other fuel gases with the appropriate torches and tips only for the purpose intended.

20. Never use acetylene at a pressure in excess of 15 pounds per square inch. Higher pressure can cause an explosion.

21. Never use oil, grease, or any other material on any apparatus or thread fitting in the oxyacetylene or oxy-fuel gas system. Oil and grease in contact with oxygen will cause spontaneous combustion.

22. Always use the correct sequence and technique for assembling and lighting the torch. Always use the correct sequence and technique for shutting off a torch.

23. Check valves must be used on all compressed gas cylinders to prevent back flow of the gas.
Code of Safe Practices Receipt

This is to certify that I have received a copy of the Cirks Construction Inc. Code of Safe Practices. I have read these instructions, understand them, and will comply with them while working for the company.

I also understand that I am to report any injury to my supervisor or manager immediately and report all safety hazards.

I understand that failure to abide by these rules may result in disciplinary action and possible termination of my employment with Cirks Construction Inc..

I further understand that I have the following rights:

• I am not required to work in any area that I feel is unsafe.
• I am entitled to information on any hazardous material or chemical that I am exposed to while working
• I am entitled to see a copy of the Cirks Construction Inc. Health, Safety, & Environmental Manual and Injury and Illness Prevention Program.
• I will not be discriminated against for reporting safety concerns.

Print Name: ________________________________ Date: ___________________

Employee Signature: ________________________________________________

Copy: Employee File
Stop Work Authority

Cirks Construction Inc. has adopted this policy to inform employees of Stop Work Authority. This ensures the safety and health of the employees.

Training
Employees will receive Stop Work Authority training before initial assignment. The training will be documented, including the employee name, the dates of training and subject.

HSE Risk
All contractors and employees have the authority and obligation to stop any task or operation where concerns or questions regarding the control of HSE risk exist.

It is the policy of Cirks Construction Inc. that no work will resume until all stop work issues and concerns have been adequately addressed.

Stop Work Intervention
Cirks Construction Inc. ensures that employees will not be reprimanded for issuing a stop work intervention.

Any form of retribution or intimidation directed at any individual or company for exercising their right to issue a stop work authority will not be tolerated by Cirks Construction Inc.

Roles and Responsibilities
All employees of Cirks Construction Inc. are responsible to initiate a Stop Work Intervention when warranted and management is responsible to create a culture where Stop Work Authority is exercised freely.

Stop Work Authority Steps
The steps to a Stop Work Authority for Cirks Construction Inc. include:

1. Stop,
2. Notify,
3. Correct, and
4. Resume.

When an unsafe condition is identified the Stop Work Intervention will be initiated, coordinated through the supervisor, initiated in a positive manner, notify all affected personnel and supervision of the stop work issue, correct the issue, and resume work when safe to do so.

Stop Work Reports
Cirks Construction Inc. ensures that Stop Work Reports will be reviewed by supervision in order to

- Measure participation,
- Determine quality of interventions and follow-ups,
- Trend common issues,
- Identify opportunities for improvement, and
- Facilitate sharing of learning.
**Follow-Up Importance**

It is of high importance of Cirks Construction Inc. to conduct a follow-up after a Stop Work Intervention has been initiated and closed.

It is the desired outcome of any Stop Work Intervention that the identified safety concern(s) have been addressed to the satisfaction of all involved persons prior to the resumption of work.
Hazard Communication Employee Training

It is important that all of our employees understand the information given about hazardous materials. If you have any questions regarding this, please ask your supervisor or contact the safety director.

This material has been prepared to assist our employees in better understanding the hazardous materials with which they commonly work.

Chemicals can enter the body in a number of ways, including inhalation, skin contact, or ingestion. The hazard of any substance is dependent on other variables such as age, sex, and health of the employee as well as the concentration and duration of exposure. In other words, the same amount of a chemical may produce very different effects on two different people.

Chemicals are controlled in the workplace in such a manner so as to keep exposures below a level that may produce a reaction in very sensitive people. These levels are set by the government in the interest of minimizing harmful health effects of chemicals in the workplace. The Occupational Safety and Health Administration (OSHA) has established specific legally enforced Permissible Exposure Limits (PEL) for hazardous substances in the workplace. The PEL indicates the concentration of airborne contaminants to which nearly all workers may be exposed to for eight hours a day, forty hours a week, over a working lifetime of 30 years, without adverse health effects.

This handbook briefly outlines the hazardous materials you may encounter in your work area. To simplify this task, we have broken down the chemicals used into special categories including:

- Solvents
- Adhesives
- Paints and Dyes
- Lubricants
- Compressed Gases

In each category, the general characteristics of the material are presented along with the potential health effects of both short-term and long-term overexposure. The use of personal protective equipment and material handling procedures under normal conditions are also included.

Additional information on the materials you may be exposed to can be found in the product’s Safety Data Sheets (SDS). A complete folder of SDS is available to you at all times in the office. Your supervisor also has copies of data sheets on commonly used items.

At any time, an employee has the right to:

- Access the SDS folder and the Hazard Communication Program.
- Receive a copy of any chemical sampling data collected in the workplace.
- See their employment medical records upon request.

Personal protective equipment acts as a barrier to the routes of entry that a chemical may take into your body. As a barrier to chemicals that can be inhaled, there are a variety of respirators
that may be used. The respirators either filter out particles, react with chemicals to neutralize them, or provide fresh filtered air. There are two important things to remember about using respirators. The first is that a respirator only works when you wear it and use it properly. Second, and equally important, is that you must use the proper respirator for the specific hazard. Respirators designed for one type of chemical will not work for another. One last note about respirators is that no one is allowed to use any respirator without proper training. It is against the law to use a respirator without formal training in its proper use.

As a barrier to skin, we have gloves, facemasks, protective clothing, and head protection. A combination of these items may be necessary to provide the proper level of protection in your area.

As a barrier to the eyes, a variety of eye protection may be used. Goggles are recommended when pouring or handling chemicals which may splash the eyes. They are also recommended while spraying adhesives and paints. Protect your eyes; your vision is priceless and irreplaceable.

There is no real protection against swallowing materials except good work practices. Always label any container to prevent incidental drinking. Always thoroughly wash your hands with soap and water before eating, drinking, or smoking. Keep any food and cigarettes away from the work area. Breads, fruits, and cigarettes can actually absorb chemicals from the air, to be inhaled or ingested later.

Prolonged exposure to excessive noise can cause permanent hearing damage. For those employees working in areas where excessive noise is generated, it is recommended that earplugs or ear muffs be used on a regular basis.

General first aid practices should be followed in the event of exposure to hazardous materials.

**EYES:** Flush eyes for at least 15 minutes with water.

**SKIN:** Wash the affected area with soap and water. If clothing is involved, remove and launder before putting back on. If caustic materials are spilled, remove clothing immediately and wash off of the body.

**INGESTION:** Do Not Induce Vomiting Unless the Label Indicates - transport the affected person to the medical clinic immediately for treatment or call 911. They will take the appropriate action.

**INHALATION:** Generally, removing the person to fresh air is adequate after short-term exposure to most vapors. If breathing difficulty develops, dial 911 and be prepared to administer CPR.

The provisions set forth by the Federal Hazard Communication Program dictate that all containers of hazardous materials must be properly labeled. All containers of hazardous materials used must have, at a minimum, the original label provided by the manufacturer or a locally prepared label describing its contents and hazards involved.
1. **Solvents:**

   a. **Halogenated Solvents**

   **Characteristics:** These products are usually clear, rapidly evaporating solvents containing chlorinates. They generally exhibit low flammability and have the consistency of water. They have a mild odor and are used in painting, stripping, and other operations. Examples of chlorinated solvents are 1,1,1-Trichloroethane, perchloroethylene, methylene chloride, and Freon products.

   **Health Hazards:** Most solvents are irritating to the eyes and upper respiratory tract. Excessive, repeated exposure to the skin may produce dermatitis and drying of the skin due to the de-fattening properties of the solvents. Most are toxic and may be harmful or fatal if swallowed. Inhalation of excessive vapors may produce narcotic effects by depressing the central nervous system. Typical symptoms of overexposure include dizziness, nausea, and light-headedness in some individuals. Excessive repeated exposure to some solvents may produce chronic health effects on organs such as lungs, liver, kidney, and nervous system. Some solvents have been shown to produce cancer in laboratory animals. Compressed Freon products may produce "freeze burns" on the skin and eyes when released. Very high concentrations of vapors may be dangerous to life and health.

   **Personal Protective Equipment/Handling:** Solvents should be handled with respect. Avoid any unnecessary exposure. Never wash hands in solvents. Wash with soap and water after using solvents. Avoid excessive skin contact. Use chemically resistant gloves if necessary. Avoid inhalation of vapors when possible. Use air-supplying respirators in areas of high concentration. Avoid contact with eyes. Use chemical goggles for protection. Provide ventilation when possible. Avoid contact with strong oxidizers (acids) and reactive metals (magnesium, aluminum powders).

   **Emergency/Special:** In the event of eye contact, flush eyes for 15 minutes with water. Wash skin with soap and water. Remove soaked clothing and wash before reuse. Do not allow wet clothing to remain in prolonged contact with skin. If ingested, do not induce vomiting, and seek medical attention immediately. Excessive inhalation should be treated by removing to fresh air. Apply artificial respiration if necessary. In the event of a major spill, evacuate the area and call the fire department. Avoid drainage into water sewage system.

   b. **Organic Solvents**

   **Characteristics:** Usually clear, rapidly evaporating petroleum or alcohol based solvents. These solvents are usually highly flammable and may or may not mix with water. They usually have an alcohol or oil-like odor and are used in a variety degreasing, painting and stripping operations. Examples of organic solvents are toluene, xylene, methyl ethyl ketone (MEK), acetone, and alcohols.

   **Health Hazards:** Organic solvents evaporate very quickly and pose a great fire hazard. Because of this rapid evaporation and the natural penetrating nature of
solvents, these materials can enter the body very rapidly through inhalation into the respiratory tract, and absorption through the skin and eyes. Exposures of these types may, in some instances, lead to skin irritation, eye irritation, and respiratory irritation. Solvents eventually enter the blood stream, and in cases of overexposure, may produce a variety of effects including nausea, headache, and dizziness. In very high concentrations, they may pose immediate threat to life and health. Chronic, repeated overexposure to organic solvents has been documented to produce adverse effects on the heart, lungs, central nervous system, liver, blood, and skin. They products may be harmful or fatal if swallowed. Some solvents may produce allergic reactions in sensitive people.

**Personal Protective Equipment/Handling:** It is important to minimize your exposure to solvents. For example; avoid skin contact by wearing non-porous gloves. Cotton or leather gloves should never be used while working with solvents because they absorb the solvent and allow it to reach your skin. If you can't wear gloves in your particular job, find other ways to avoid contact with the solvents. For example; use tongs to hold parts while cleaning them with solvents. Never wash your hands in a solvent - use soap or a waterless hand cleaner. Barrier creams may provide additional protection. Use ventilation systems when possible and avoid breathing solvent vapors. If your job requires it, wear a respirator. Use air-supplying respirators in areas of high concentrations. Protect your eyes with safety glasses or goggles. Avoid strong oxidizing agents. Ground and bond all containers when pouring or transferring chemicals.

**Emergency/Special:** In the event of eye contact flush eyes for 15 minutes with water. Avoid prolonged skin contact with any solvents. Wash skin with soap and water. Remove soaked clothing and wash before reuse. If ingested, seek medical help immediately - do not induce vomiting. If inhaled, move victim to fresh air and, if necessary, give artificial respiration. In the event of a spill, eliminate ignition sources, evacuate the area, and contact the fire department. Avoid drainage into water or sewage system.

2. **Adhesives**

**Characteristics:** Adhesives are typically made up of resins composed of two reaction components: 1) the curing agent (hardener, catalyst, accelerator, activator or setting agent) and 2) the resin. The cured resins are generally found in a paste form, and the uncured resins are viscous liquids or solids.

**Health Hazards:** Some of the liquid uncured resins are skin irritants, sensitizers, or both. Solvents are often the major component of the uncured resins. They are primary skin irritants as a result of their ability to dry and remove natural oils from the skin. They may enhance the sensitizing effects of the dermatitis producing components discussed above.

**Personal Protective Equipment/Handling:** Because of the varying effects of these products, it is important that personal protective equipment be used. Safety glasses should be worn at all times. Impervious gloves and clothing should be worn. Remove and wash soaked clothing before reuse. If overexposure through inhalation occurs, remove the affected person to fresh air. Adhesives should only be used in
well-ventilated areas. Air-purifying respirators may be necessary if ventilation is inadequate.

Emergency/Special: Keep all stored material away from heat and flames. Adequate ventilation should be provided if any of the liquid components spill. In the event of eye contact, flush with water for 15 minutes. If skin contact occurs, wash the affected area with soap and water. Do not induce vomiting if ingestion occurs. Seek medical attention immediately.

3. Paints and Dyes

a. Water Based Acrylics, Latex Paints

Characteristics: These products are available in a variety of colors for many uses including interior and exterior painting of equipment, vehicles, and structures. They are usually nonflammable, but some may burn under extreme situations. They are all water soluble, and may contain some alcohol or ammonia solvents. They are pigmented with a variety of compounds, and usually have a thick, soupy consistency with a mild ammonia odor.

Health Hazards: Water based paints are generally considered non-hazardous. Some may contain solvents that may produce mild eye or nose irritation. Some of these products may produce limited skin irritations in extremely sensitive people. These products may be harmful if swallowed. Under normal working conditions, these products are generally considered safe for use.

Personal Protective Equipment/Handling: General ventilation should be sufficient, with exhaust ventilation necessary in confined spaces. Goggles or similar means of eye protection should always be used in any painting process. Gloves and protective clothing are recommended for extremely sensitive individuals. Avoid unnecessary exposure or contact. Do not freeze these products. Wash hands/skin with soap and water after use. Store in a cool, dry place.

Emergency/Special: In the event of eye contact, flush with water for 15 minutes. Consult with physician if irritation persists. If excessive inhalation occurs, remove victim to fresh air. In the event of ingestion, give water and contact physician immediately. Wash soaked clothes before reuse. Use only soap and water to wash skin.

b. Lacquers, Primers, Non-Water Based Paint

Characteristics: These products come in a variety of colors and are used in various coating applications including priming, painting, and lacquering. They may contain both organic and halogenated solvents, and most have pigments that contain heavy metals. Some of the solvents and pigments that may be contained include acetone, diisobutyl ketone, xylene, methylene chloride, lead, chromium, and zinc compounds. They are usually highly flammable.

Health Hazards: Because of the high concentration of solvents in these paints, the health hazards are much like those discussed in category 1a and 1b, Solvents.
These products also contain heavy metal compounds such as lead, chromium, and zinc. These heavy metals may build up in the blood producing chronic effects such as lead poisoning, which is characterized by weakness, difficulties in concentrating, and sleep problems.

Personal Protective Equipment/Handling: These products should be handled with care. Gloves are recommended for skin sensitive individuals. Goggles or safety glasses should be worn at all times. Mechanical ventilation and respirators may be required depending on size of operation and type of paint. Refer to specific SDS for information. Long sleeve shirts are recommended. Do not use thinners or other solvents to remove paints from hands. Use lava soap and water, followed by hand lotion to prevent drying of the skin. Remove and wash soaked clothing before reuse. Do not apply to hot surfaces. Avoid sparks or flames when using. Never smoke in areas where these paints are being applied. Avoid breathing vapors and paint mist. Ground and bond containers during transfers. Store in a cool, dry place preferably in a flammable liquid storage cabinet.

Emergency/Special: In the event of eye contact, flush with water for 15 minutes. Wash affected skin areas with soap and water. In the event of ingestion, do not induce vomiting; contact a physician immediately. Inhalation exposure should be treated by removing victim to fresh air. Apply artificial respiration if necessary. In the event of a spill, eliminate ignition sources, evacuate area, and contact fire department. Avoid drainage into water or sewage systems.

4. Lubricants

a. Insoluble Oils and Greases

Characteristics: Commonly known as lubricating oils or greases, these oils are generally petroleum based hydrocarbon mixtures that contain no water. Appearance may range from clear light brown liquids to dark brown greases. Oils can be fire hazards because they are combustible. Examples of common oils and greases are multi weight motor oil, gear lubricating oils and cutting oils used in some machining operations.

Health Hazards: Petroleum based oils and greases are generally of low toxicity. Oil mists and vapors can be generated from sawing and metal forming operations. Inhalation of these mists may cause mild irritation of the nose and throat. The mist may also irritate the eyes. Overexposure by inhalation, although rare, can cause headaches, nausea, or dizziness. The most common exposure to oils and greases is through the skin. Excessive or prolonged exposure of the skin to oils, especially used, dirty, or contaminated oils may cause chronic skin conditions such as contact dermatitis. Ingestion of these substances may be harmful, depending on the purity of the oil and the amount ingested.

Personal Protective Equipment/Handling: Under most circumstances, inhalation overexposure to oil products is not common. If no local exhaust ventilation is available in operations that generate oil mist, a respirator with an organic vapor/particulate cartridge should be utilized. There is no substitute for safe work practices and good personal hygiene. Any practical way to reduce time and
frequency of skin exposure to oils is recommended. Mild waterless hand cleaners are helpful in removing oil. **Never use solvents to clean the skin.** This will only increase the risk of unusual skin disorders or dermatitis. Oil resistant protective gloves should be used whenever feasible, and skin cream should be applied after washing to prevent drying. Safety glasses or goggles should be worn to prevent oil from splashing into the eyes.

**Emergency/Special:** Lubricating oils, like any other chemicals, should be handled with care. In the event of eye contact, flush with water for 15 minutes, and then seek medical attention. In case of incidental ingestion, do not induce vomiting, give milk or water, and seek medical attention. Any areas of skin contact should be washed thoroughly with mild soap and lukewarm water or waterless hand cleaner to reduce the risk of skin disorders.

b. Aerosol Spray Lubricants

**Characteristics:** Aerosol spray lubricants, unlike other oil based lubricants, generally contain a high percentage of halogenated solvents such as 1,1,1 trichloroethane. Examples of spray lubricants include gear oil and silicone spray.

**Health Hazards:** Refer to category 1a (Halogenated Solvents) for overall health hazards of aerosol spray lubricants.

**Additional Information:** Most of the aerosol sprays are usually extremely flammable because of the propellants used (butane, propane, etc.). Phosgene gas, an extremely toxic gas, may be generated as a decomposition product of combustion if the spray lubricants come in contact with a flame (e.g., lighted cigarette, or welding operations) or a very hot metal. Phosgene gas can cause severe irritation to the nose, throat, and eyes, even at extremely low concentrations. Exposure to moderate concentrations can cause a delayed onset of pulmonary edema (fluid in the lungs) that may progress to pneumonia.

**Personal Protective Equipment/Handling:** All solvent-based materials should be used in well-ventilated areas. Use a respirator if spraying moderate concentrations to avoid overexposure. Air-supplying respirators should be used if high concentrations are present. Avoid contact with the skin to reduce the risk of irritation or dermatitis. Use chemically resistant gloves for prolonged or repeated contact. Always wear safety glasses or goggles to prevent eye contact with the aerosol spray.

**Emergency/Special:** In the event of eye contact, flush with water for 15 minutes. Wash skin with soap and water. If ingested, do not induce vomiting and seek immediate medical attention. In case of overexposure by inhalation, remove the person to fresh air, seek medical attention, and apply artificial respiration if necessary. Containers should be stored in a clean, dry area. Avoid storing at temperatures above 80 degrees F. to reduce the risk of the aerosol containers bursting or exploding.

5. Compressed Gases
Characteristics:  These gases are typically stored in cylinders. The gases are frequently stored in a liquid state and are utilized in a variety of applications such as welding (acetylene), oxidation (oxygen), fuel delivery (propane, butane), cryogenics (liquid helium, oxygen, nitrogen).

Health Hazards:  Depending on the specific gas contained within the cylinder, the associated hazards exhibited can be similar to those of the substances described in previous categories. For example; anhydrous ammonia gas falls within the corrosive/caustic hazard category. Asphyxiation is the primary hazard associated with compressed gases since they can displace oxygen if there is a sudden and quick release, particularly in confined work areas. Compressed gases either in liquid or vapor form are cryogenic and will cause severe frostbite and burns if allowed to contact the skin.

Personal Protective Equipment/Handling:  Self-contained or airline breathing apparatus should be worn in oxygen-deficient atmospheres. General ventilation is usually adequate to maintain sufficient oxygen level. Avoid skin contact with liquid gases. Avoid smoking or other sources of ignition around oxidizers and fuel gases. Compressed gas cylinders should always be handled with extreme care as serious incidents may result from the misuse, abuse or mishandling of cylinders.

Emergency/Special:  In the event of a gas leak, evacuate all personnel from the danger area. Shut off the leak if it does not pose a grave risk. Ventilate the area of the leak and move the leaking container to a well-ventilated area. If inhalation overexposure occurs, remove victim to fresh air and give artificial respiration if necessary. If liquid contacts skin, flood the affected area with warm water and seek medical attention.
Excavation Safety Program

I. OBJECTIVE

This Excavation Safety Program has been developed to protect employees from safety hazards that may be encountered during work in trenches and excavations. This program is intended to assure that:

- Cirks Construction Inc. has appointed one or more individuals within the company to assure compliance with the requirements of this program.
- The responsibilities of the Competent Person(s) and workers are clearly detailed.
- Employees who perform work in excavations are aware of their responsibilities and know how to perform the work safely.
- All persons involved in excavation and trenching work have received appropriate training in the safe work practices that must be followed when performing this type of work.

II. ASSIGNMENT OF RESPONSIBILITY

a. Employer

In administering the Excavation Safety Program, Cirks Construction Inc. will:

- Monitor the overall effectiveness of the program.
- Provide atmospheric testing and equipment selection as needed.
- Provide personal protective equipment as needed.
- Provide protective systems as needed.
- Provide training to affected employees and supervisors.
- Provide technical assistance as needed.
- Preview and update the program on at least an annual basis, or as needed.

b. Program Manager

The Cirks Construction Inc. safety director acts as the competent person for Cirks Construction Inc. in reference to this program, and must assure that:

- The procedures described in this program are followed.
- Employees entering excavations or trenches are properly trained and equipped to perform their duties safely.
- All required inspections, tests, and recordkeeping functions have been performed.

c. Employees
All employees, including contractor personnel, who work in or around excavations must comply with the requirements of this program. Employees are responsible for reporting hazardous practices or situations to Cirks Construction Inc. management, as well as reporting incidents that cause injury to themselves or other employees to the Competent Person.

III. TRAINING

a. Training Schedule

- All personnel involved in trenching or excavation work shall be trained in the requirements of this program by the Cirks Construction Inc. superintendent with assistance from the appropriate supervisors.
- Training shall be performed before employees are assigned duties in excavations.
- Retraining will be performed when work site inspections indicate that an employee does not have the necessary knowledge or skills to safely work in or around excavations or when changes to this program are made.
- Training records will be maintained by the Cirks Construction Inc. superintendent and shall include:
  - Date of the training program.
  - Name(s) of the instructor(s) who conducted the training.
  - A copy of the written material presented.
  - Name(s) of the employee(s) who received the training

b. Training Components

The training provided to all personnel who perform work in excavations shall include:

- The work practices that must be followed during excavating or working in excavations.
- The use of personal protective equipment that will typically be required during work in excavations; including but not limited to safety shoes, hardhats, and fall protection devices.
- Procedures to be followed if a hazardous atmosphere exists or could reasonably be expected to develop during work in an excavation.
- The OSHA Excavation Standard.
- Emergency and non-entry rescue methods, and the procedure for calling rescue services.
- Cirks Construction Inc. policy on reporting incidents causing injury to employees.

c. Training and Duties of Program Manager
The Competent Person, shall receive the training detailed in this program as well as training on the requirements detailed in the OSHA Excavation Standard. The Program Manager shall:

- Coordinate, actively participate in, and document the training of all employees affected by this program.
- Ensure on a daily basis or more often as detailed in this program that worksite conditions are safe for employees to work in excavations.
- Determine the means of protection that will be used for each excavation project.
- Ensure, if required, that the design of a protective system has been completed and approved by a registered professional engineer before work begins in an excavation.
- Make available a copy of this program and the OSHA Excavation Standard to any employee who requests it.

IV. EXCAVATION REQUIREMENTS

a. Utilities and Pre-Work Site Inspection

Prior to excavation, the site shall be thoroughly inspected by the Cirks Construction Inc. superintendent to determine if special safety measures must be taken.

b. Surface Encumbrances

All equipment, materials, supplies, permanent installations (i.e., buildings or roadways), trees, brush, boulders, and other objects at the surface that could present a hazard to employees working in the excavation shall be removed or supported as necessary to protect employees.

c. Underground Installations

The location of sewer, telephone, fuel, electric, water, or any other underground installations or wires that may be encountered during excavation work shall be determined and marked prior to opening an excavation. Arrangements shall be made as necessary by the Cirks Construction Inc. superintendent with the appropriate utility entity for the protection, removal, shutdown, or relocation of underground installations.

If it is not possible to establish the exact location of these installations, the work may proceed with caution if detection equipment or other safe and acceptable means are used to locate the utility.

Excavation shall be done in a manner that does not endanger the underground installations or the employees engaged in the work. Utilities left in place shall be protected by barricades, shoring, suspension, or other means as necessary to protect employees.
d. Protection of the Public

Barricades, walkways, lighting, and posting shall be provided as necessary for the protection of the public prior to the start of excavation operations.

- Guardrails, fences, or barricades shall be provided on excavations adjacent to walkways, driveways, and other pedestrian or vehicle thoroughfares. Warning lights or other illumination shall be maintained as necessary for the safety of the public and employees from sunset to sunrise.

- Wells, holes, pits, shafts, and all similar hazardous excavations shall be effectively barricaded or covered and posted as necessary to prevent unauthorized access. All temporary excavations of this type shall be backfilled as soon as possible.

- Walkways or bridges protected by standard guardrails shall be provided where employees and the general public are permitted to cross over excavations. Where workers in the excavation may pass under these walkways or bridges, a standard guardrail and toe board shall be used to prevent the hazard of falling objects. Information on the requirements for guardrails and toe boards may be obtained by contacting the Cirks Construction Inc. superintendent.

e. Protection of Employees

Stairs, ladders, or ramps shall be provided at excavation sites where employees are required to enter trench excavations over four (4) feet deep. The maximum distance of lateral travel (along the length of the trench) necessary to reach the means of egress shall not exceed 25 feet.

- Structural Ramps
  - Structural ramps used solely by employees as a means of access or egress from excavations shall be designed by a competent person. Structural ramps used for access or egress of equipment shall be designed by a person qualified in structural design and shall be constructed in accordance with the design.
  - Ramps and runways constructed of two or more structural members shall have the structural members connected together to prevent movement or displacement.
  - Structural members used for ramps and runways shall be of uniform thickness.
  - Cleats or other appropriate means used to connect runway structural members shall be attached to the bottom of the runway or shall be attached in a manner to prevent tripping.
  - Structural ramps used in place of steps shall be provided with cleats or other surface treatments on the top surface to prevent slipping.

- Ladders
When portable ladders are used, the ladder side rails shall extend a minimum of three (3) feet above the upper surface of the excavation.

Ladders shall have nonconductive side rails if work will be performed near exposed energized equipment or systems.

Two or more ladders, or a double-cleated ladder, will be provided where 25 or more employees will be conducting work in an excavation where ladders serve as the primary means of egress, or where ladders serve two-way traffic.

Ladders will be inspected prior to use for signs of damage or defects. Damaged ladders will be removed from service and marked with “Do Not Use” until repaired.

Ladders shall be used only on stable and level surfaces unless secured. Ladders placed in any location where they can be displaced by workplace activities or traffic shall be secured or barricades shall be used to keep these activities away from the ladders.

Non self-supporting ladders shall be positioned so that the foot of the ladder is one-quarter of the working length away from the support.

Employees are not permitted to carry any object or load while on a ladder that could cause them to lose their balance and fall.

f. Exposure to Vehicular Traffic

Employees exposed to vehicular traffic shall be provided with and shall wear warning vests or other suitable garments marked with or made of reflectorized or high-visibility material. Warning vests worn by flagmen shall be red or orange and shall be reflectorized material if worn during night work. Emergency lighting, such as spotlights or portable lights, shall be provided as needed to perform work safely.

g. Exposure to Falling Loads

No employee is permitted underneath loads being handled by lifting or digging equipment. Employees are required to stand away from any vehicle being loaded or unloaded to avoid being struck by any spillage or falling materials. Operators may remain in the cabs of vehicles being loaded or unloaded when the vehicles provide adequate protection for the operator during loading and unloading operations.

h. Warning System for Mobile Equipment

A warning system shall be used when mobile equipment is operated adjacent to the edge of an excavation if the operator does not have a clear and direct view of the edge of the excavation. The warning system shall consist of barricades, mechanical signals, or stop logs. If possible, the grade should be away from the excavation.

i. Hazardous Atmospheres
A competent person will test the atmosphere in excavations over four (4) feet deep if a hazardous atmosphere exists or could reasonably be expected to exist. A hazardous atmosphere could be expected, for example, in excavations in landfill areas, areas where hazardous substances are stored nearby, or near areas containing gas pipelines.

- Adequate precautions shall be taken to prevent employee exposure to atmospheres containing less than 19.5 percent oxygen and other hazardous atmospheres. These precautions include providing proper respiratory protection or forced ventilation of the workspace.
- Forced ventilation or other effective means shall be used to prevent employee exposure to an atmosphere containing a flammable gas in excess of ten (10) percent of the lower flammability limit of the gas.
- When controls are used that are intended to reduce the level of atmospheric contaminants to acceptable levels, continuous air monitoring will be performed by the Cirks Construction Inc. superintendent or competent person. The device used for atmospheric monitoring shall be equipped with an audible and visual alarm.
- Atmospheric testing will be performed using a properly calibrated direct reading gas monitor. Direct reading gas detector tubes or other acceptable means may also be used to test potentially toxic atmospheres.
- Each atmospheric testing instrument shall be calibrated by the Cirks Construction Inc. superintendent or competent person on a schedule and in a manner recommended by the manufacturer. In addition:
  - Any atmospheric testing instrument that has not been used within 30 days shall be recalibrated prior to use.
  - Each atmospheric testing instrument shall be calibrated at least every six (6) months.
- Each atmospheric testing instrument will be field checked immediately prior to use to ensure that it is operating properly.

j. Personal Protective Equipment

- All employees working in trenches or excavations shall wear approved hardhats and steel-toe or composite-toe shoes or boots.
- Employees exposed to flying fragments, dust, or other materials produced by drilling, sawing, sanding, grinding, and similar operations shall wear approved safety glasses with side shields.
- Employees performing welding, cutting, or brazing operations, or are exposed to the hazards produced by these tasks, shall wear approved spectacles or a welding face-shield or a helmet, as determined by the Cirks Construction Inc. superintendent.
- Employees entering bell-bottom pier holes or other similar deep and confined footing excavations shall wear a harness with a lifeline securely attached to it.
The lifeline shall be separate from any line used to handle materials and shall be individually attended at all times while the employee wearing the lifeline is in the excavation.

- Employees shall wear, as determined by the Competent Person, approved gloves or other suitable hand protection.
- Employees using or working in the immediate vicinity of hammer drills, masonry saws, jackhammers, or similar high-noise producing equipment shall wear suitable hearing protection, as determined by the Competent Person.
- Each employee working at the edge of an excavation six (6) feet or more deep shall be protected from falling. Fall protection shall include guardrail systems, fences, barricades, covers, or a tie-back system meeting OSHA requirements, as determined by the Cirks Construction Inc. superintendent.
- Emergency rescue equipment, such as breathing apparatus, a safety harness and line, and a basket stretcher, shall be readily available where hazardous atmospheric conditions exist or may develop during work in an excavation. This equipment shall be attended to when in use. Only personnel who have received approved training and have appropriate equipment shall attempt retrieval that would require entry into a hazardous atmosphere. If entry into a known hazardous atmosphere must be performed, then the Cirks Construction Inc. superintendent shall be given advance notice so that the hazards can be evaluated and rescue personnel placed on standby if necessary.

k. Walkways and Guardrails

Walkways shall be provided where employees or equipment are permitted to cross over excavations. Guardrails shall be provided where walkways, accessible only to on-site project personnel, are six (6) feet or more above lower levels.

l. Protection from Water Accumulation Hazards

- Employees are not permitted to work in excavations that contain or are accumulating water unless precautions have been taken to protect them from the hazards posed by water accumulation. Precautions may include special support or shield systems to protect from cave-ins, water removal to control the level of accumulating water, or use of safety harnesses and lifelines.
- If water is controlled or prevented from accumulating by the use of water removal equipment, the water removal equipment and operation shall be monitored by a person trained in the use of that equipment.
- If excavation work interrupts the natural drainage of surface water (such as streams), diversion ditches, dikes, or other suitable means shall be used to prevent surface water from entering the excavation. Precautions shall also be taken to provide adequate drainage of the area adjacent to the excavation. Excavations subject to runoff from heavy rains shall be re-inspected by the Cirks Construction Inc. superintendent after each rain incident to determine if additional precautions, such as special support or shield systems to protect from cave-ins,
water removal to control the level of accumulating water, or use of safety harnesses and lifelines, should be used.

- The Cirks Construction Inc. superintendent shall inform affected workers of the precautions or procedures that are to be followed if water accumulates or is accumulating in an excavation.

m. Stability of Adjacent Structures

The Cirks Construction Inc. superintendent will determine if the excavation work could affect the stability of adjoining buildings, walls, sidewalks, or other structures.

- Support systems (such as shoring, bracing, or underpinning) shall be used to assure the stability of structures and the protection of employees where excavation operations could affect the stability of adjoining buildings, walls, or other structures.

- Excavation below the level of the base or footing of any foundation or retaining wall that could be reasonably expected to pose a hazard to employees shall not be permitted, except when:
  - A support system, such as underpinning, is provided to ensure the safety of employees and the stability of the structure.
  - The excavation is in stable rock.
  - A registered professional engineer has approved the determination that the structure is sufficiently removed from the excavation so as to be unaffected by the excavation activity.
  - A registered professional engineer has approved the determination that such excavation work will not pose a hazard to employees.

- Sidewalks, pavements, and appurtenant structures shall not be undermined unless a support system or other method of protection is provided to protect employees from the possible collapse of such structures.

- Where review or approval of a support system by a registered professional engineer is required, the Cirks Construction Inc. superintendent shall secure this review and approval in writing before the work begins.

n. Protection from Falling Objects and Loose Rocks or Soil

- Adequate protection shall be provided to protect employees from loose rock or soil that could pose a hazard by falling or rolling from an excavation face. Such protection shall consist of:
  - Scaling to remove loose material.
  - Installation of protective barricades, such as wire mesh or timber, at appropriate intervals on the face of the slope to stop and contain falling material.
  - Benching sufficient to contain falling material.
• Excavation personnel shall not be permitted to work above one another where the danger of falling rock or earth exists.

• Employees shall be protected from excavated materials, equipment, or other materials that could pose a hazard by falling or rolling into excavations.

• Protection shall be provided by keeping such materials or equipment at least two (2) feet from the edge of excavations, by use of restraining devices that are sufficient to prevent materials or equipment from falling or rolling into excavations, or by a combination of both if necessary.

• Materials and equipment may, as determined by the Cirks Construction Inc. superintendent, need to be stored further than two (2) feet from the edge of the excavation if a hazardous loading condition is created on the face of the excavation.

• Materials piled, grouped, or stacked near the edge of an excavation must be stable and self-supporting.

o. Inspection by Program Manager

• The Competent Person in excavation/trenching shall conduct daily inspections of excavations, adjacent areas, and protective systems for evidence of a situation that could result in possible cave-ins, failure of protective systems, hazardous atmospheres, or other hazardous conditions. An inspection shall be conducted by the Cirks Construction Inc. superintendent prior to the start of work and as needed throughout the shift. Inspections shall also be made after every rainstorm or other hazard-increasing occurrence. These inspections are only required when the trench will be or is occupied by employees.

• Where the Cirks Construction Inc. superintendent finds evidence of a situation that could result in a possible cave-in, failure of protective systems, hazardous atmosphere, or other hazardous conditions, exposed employees shall be removed from the hazardous area until precautions have been taken to assure their safety.

• The Cirks Construction Inc. superintendent shall maintain a written log of all inspections conducted. This log shall include the date, work site location, results of the inspection, and a summary of any action taken to correct existing hazards.

V. PROTECTIVE SYSTEM REQUIREMENTS

a. Protection of Employees

• Employees in an excavation shall be protected from cave-ins by using either an adequate sloping and benching system or an adequate support or protective system. The only exceptions are:
  o Excavations made entirely in stable rock.
  o Excavations less than five (5) feet in depth where examination of the ground by the Cirks Construction Inc. superintendent provides no indication of a potential cave-in.
• Protective systems shall be capable of resisting all loads that could reasonably be expected to be applied to the system.

b. Design of Sloping and Benching Systems

The slope and configuration of sloping and benching systems shall be selected and constructed by the Cirks Construction Inc. superintendent in accordance with the following options:

• Allowable configurations and slopes
  o Excavations shall be sloped at an angle no steeper than one and one-half (1 ½) horizontal to one (1) vertical (34 degrees measured from the horizontal), unless one of the options listed below is used.
  o Slopes shall be properly excavated depending on soil type as shown in 29 CFR 1926, Subpart P, Appendix B.

• Determination of slopes and configurations using 29 CFR 1926, Subpart P, Appendices A and B.

The maximum allowable slopes and allowable configurations for sloping and benching systems shall meet the requirements set forth in these appendices.

• Designs using other tabulated data.
  The design of sloping or benching systems may be selected from, and shall be constructed in accordance with, other tabulated data, such as tables and charts. The tabulated data used must be in written form and include the following:
  o Identification of the factors that affect the selection of a sloping or benching system.
  o Identification of the limits of the use of the data, including the maximum height and angle of the slopes determined to be safe.
  o Other information needed by the user to make correct selection of a protective system.
  o At least one copy of the tabulated data that identifies the registered professional engineer who approved the data shall be maintained at the jobsite during construction of the protective system. After that time, the data may be stored off the jobsite, and shall be maintained by the Competent Person.

• Design by a registered professional engineer
  o Sloping or benching systems designed in a manner other than those described in the preceding three options shall be approved by a registered professional engineer.
  o Designs shall be in written form and shall include at least the following information:
    • The maximum height and angle of the slopes that were determined to be safe for a particular project.
• The identity of the registered professional engineers who approved the design.
  o At least one copy of the design shall be maintained at the jobsite while the slope is being constructed. After that time, the design may be stored off the jobsite, and shall be maintained by Competent Person.

c. Design of Support, Shield, and Other Protective Systems

The design of support systems, shield systems, and other protective systems shall be selected and constructed by a qualified subcontractor in accordance with the following Cal/Fed OSHA requirements:
  o Timber shoring in trenches shall be designed in accordance with the requirements of the OSHA guidelines.
  o Aluminum hydraulic shoring shall be designed in accordance with the manufacturer’s tabulated data or the requirements of the OSHA guidelines.

• Designs using manufacturer’s tabulated data
  o Support systems, shield systems, and other protective systems designed from manufacturer’s tabulated data shall be constructed and used in accordance with all specifications, recommendations, and limitations issued or made by the manufacturer.
  o Deviation from the specifications, recommendations, and limitations issued or made by the manufacturer shall be allowed only after the manufacturer issues specific written approval.
  o Manufacturer’s specifications, recommendations, and limitations, as well as the manufacturer’s written approval to deviate from the specifications, recommendations, and limitations, shall be kept in written form at the jobsite during construction of the protective system(s). After that time, the information may be stored off the jobsite, and shall be maintained by the Competent Person.

• Designs using other tabulated data
  o Designs of support systems, shield systems, and other protective systems shall be selected from and constructed in accordance with tabulated data, such as tables and charts.

The tabulated data shall be in written form and shall include all of the following:
  ▪ Identification of the factors that affect the selection of a protective system drawn from such data.
  ▪ Identification of the limits of the use of such data.
  ▪ Information needed by the user to make a correct selection of a protective system from the data.

  o At least one written copy of the tabulated data, which identifies the registered professional engineer who approved the data, shall be maintained at the jobsite during construction of the protective system. After that time, the data
may be stored off the jobsite, and shall be maintained by the Cirks Construction Inc. superintendent.

- Design by a registered professional engineer
  - Support systems, shield systems, and other protective systems designed in a manner other than the preceding three options shall be approved by a registered professional engineer.

- Designs shall be in written form and shall include:
  - A plan indicating the sizes, types, and configurations of the materials to be used in the protective system.
  - The identity of the registered professional engineer who approved the design.

- At least one copy of the design shall be maintained at the jobsite during construction of the protective system. After that time, the design may be stored off the jobsite, and shall be maintained by the Competent Person.

d. Materials and Equipment

- Materials and equipment used for protective systems shall be free from damage or defects that might affect their proper function.

- Manufactured materials and equipment used for protective systems shall be used and maintained in accordance with the recommendations of the manufacturer, and in a manner that will prevent employee exposure to hazards.

- When materials or equipment used for protective systems are damaged, the Cirks Construction Inc. superintendent shall ensure that these systems are examined by a competent person to evaluate suitability for continued use. If the competent person cannot assure that the material or equipment is able to support the intended loads or is otherwise suitable for safe use, then such material or equipment shall be removed from service. The material or equipment shall then be evaluated and approved by a registered professional engineer before being returned to service.

e. Installation and Removal of Supports

- General
  - Members of support systems shall be securely connected together to prevent sliding, falling, kick-outs, or other potential hazards.
  - Support systems shall be installed and removed in a manner that protects employees from cave-ins, structural collapses, or from being struck by members of the support systems.
  - Individual members of the support systems shall not be subjected to loads exceeding those that they were designed to support.
  - Before temporary removal of individual support members begins, additional precautions shall be taken as directed by the Cirks Construction Inc.
superintendent to ensure the safety of employees (i.e., the installation of other structural members to carry the loads imposed on the support system).

- Removal of support systems shall begin at, and progress from, the bottom of the excavation. Members shall be released slowly. If there is any indication of possible failure of the remaining members of the structure or possible cave-in of the sides of the excavation, the work shall be halted until it can be examined by the Cirks Construction Inc. superintendent.

- Backfilling shall progress in conjunction with the removal of support systems from excavations.

**Additional Requirements**

- Excavation of material to a level no greater than two (2) feet below the bottom of the members of a support system is allowed, but only if the system is designed to resist the forces calculated for the full depth of the trench. There shall be no indications of a possible loss of soil from behind or below the bottom of the support system while the trench is open.

- Installation of a support system shall be closely coordinated with the excavation of trenches.

f. **Sloping and Benching Systems**

Employees are not permitted to work above other employees in the faces of sloped or benched systems, except when employees at lower levels are protected from the hazards of falling, rolling, or sliding material or equipment.

g. **Shield Systems**

1. **General**

   - Shield systems shall not be subjected to loads that are greater than those they are designed to withstand.

   - Shields shall be installed in a manner that will restrict lateral or other hazardous movement of the shield and could occur during cave-in or unexpected soil movement.

   - Employees shall be protected from the hazard of cave-ins when entering or exiting the areas protected by shields.

   - Employees are not permitted in trenches when shields are being installed, removed, or moved vertically.

2. **Additional Requirements**

   - Excavation of material to a level no greater than two (2) feet below the bottom of the shield system is allowed, but only if the system is designed to resist the forces calculated for the full depth of the trench.

   - There shall be no indications of a possible loss of soil from behind or below the bottom of the shield system while the trench is open.
VI. INCIDENT INVESTIGATIONS

All incidents that result in injury to workers, as well as near misses, regardless of their nature, shall be reported and investigated. Investigations shall be conducted by Cirks Construction Inc. superintendent as soon after an incident as possible to identify the cause and means of prevention to eliminate the risk of reoccurrence.

In the event of such an incident, the Excavation Safety Program shall be reevaluated by Cirks Construction Inc. superintendent to determine if additional practices, procedures, or training are necessary to prevent similar future incidents.

VII. CHANGES TO PROGRAM

Any changes to the Excavation Safety Program shall be approved by Cirks Construction Inc. superintendent, and shall be reviewed by a qualified person as the job progresses to determine additional practices, procedures, or training needs necessary to prevent injuries. Affected employees shall be notified of procedure changes, and trained if necessary. A copy of this program shall be maintained at the jobsite by Cirks Construction Inc. superintendent.

VIII. GLOSSARY

**Accepted engineering practices:** The standards of practice required by a registered professional engineer.

**Aluminum hydraulic shoring:** A manufactured shoring system consisting of aluminum hydraulic cylinders (cross-braces) used with vertical rails (uprights) or horizontal rails (wales). This system is designed to support the sidewalls of an excavation and prevent cave-ins.

**Bell-bottom pier hole:** A type of shaft or footing excavation, the bottom of which is made larger than the cross section above to form a bell shape.

**Benching system:** A method of protecting employees from cave-ins by excavating the sides of an excavation to form one or more horizontal steps, usually with vertical or near-vertical surfaces between levels.

**Cave-in:** The movement of soil or rock into an excavation, or the loss of soil from under a trench shield or support system, in amounts large enough to trap, bury, or injure and immobilize a person.

**Competent person:** A person who has been trained to identify hazards in the workplace, or working conditions that are unsafe for employees, and who has the authority to have these hazards corrected.

**Cross braces:** The horizontal members of a shoring system installed from side to side of the excavation. The cross braces bear against either uprights or wales.

**Excavation:** Any man-made cut, cavity, trench, or depression in an earth surface formed by earth removal.
Faces or sides: The vertical or inclined earth surfaces formed as a result of excavation work.

Failure: The movement or damage of a structural member or connection that makes it unable to support loads.

Hazardous atmosphere: An atmosphere that is explosive, flammable, poisonous, corrosive, oxidizing, irritating, oxygen deficient, toxic, or otherwise harmful, that may cause death, illness, or injury.

Kick-out: The incidental movement or failure of a cross brace.

Program Manager: The individual within the company who oversees excavation work and is responsible for assuring compliance with this program.

Protective system: A method of protecting employees from cave-ins, from material that could fall or roll from an excavation face into an excavation, or from the collapse of adjacent structures. Protective systems include support systems, sloping and benching systems, shield systems, and other systems that provide the necessary protection.

Ramp: An inclined walking or working surface that is used to gain access to one point from another. A ramp may be constructed from earth or from structural materials such as steel or wood.

Sheeting: The members of a shoring system that retain the earth in position and in turn are supported by other members of the shoring system.

Shield system: A structure used in an excavation to withstand cave-ins and which will protect employees working within the shield system. Shields can be permanent structures or portable units moved along as work progresses. Shields used in trenches are usually referred to as trench boxes or trench shields.

Shoring system: A structure that is built or put in place to support the sides of an excavation to prevent cave-ins.

Sides: See Faces.

Sloping system: Sloping the sides of an excavation away from the excavation to protect employees from cave-ins. The required slope will vary with soil type, weather, and surface or near surface loads that may affect the soil in the area of the trench (such as adjacent buildings, vehicles near the edge of the trench, etc.).

Stable rock: Natural solid mineral material that can be excavated with vertical sides that will remain intact while exposed.

Structural ramp: A ramp built of steel or wood, usually used for vehicle access. Ramps made of soil or rock are not considered structural ramps.
**Support system**: A structure used as underpinning, bracing or shoring, which provides support to an adjacent structure, underground installation, or the sides of an excavation.

**Tabulated data**: Tables and charts approved by a registered professional engineer and used to design and construct a protective system.

**Trench**: A narrow excavation (in relation to its height) made below the surface of the ground.

**Trench box or trench shield**: See Shield System.

**Uprights**: The vertical members of a trench shoring system placed in contact with the earth and usually positioned so the individual members do not contact each other. Uprights placed so that individual members are closely spaced, in contact with or interconnected to each other, are often called **sheeting**.

**Wales**: Horizontal members of a shoring system placed in the direction of the excavation face whose sides bear against the vertical members of the shoring system or earth (the uprights or sheeting).
**Scaffold Safety Program - Construction Safety Program**

**Purpose**

The purpose of this safety policy and procedure is to establish guidelines for the protection of Cirks Construction Inc. employees who work on scaffold work surfaces.

**Applicability**

Scaffolding has a variety of applications. It is used in new construction, alteration, routine maintenance, renovation, painting, repairing, and removal activities. Scaffolding offers a safer and more comfortable work arrangement compared to leaning over edges, stretching overhead, and working from ladders. Scaffolding provides employees safe access to work locations, level and stable working platforms, and temporary storage for tools and materials for performing immediate tasks. Scaffolding incidents mainly involve personnel falls and falling materials caused by equipment failure, incorrect operating procedures, and environmental conditions. Additionally, scaffolding overloading is a frequent single cause of major scaffold failure. This safety policy and procedure provides guidelines for the safe use of scaffolds. It includes training provisions and guidelines for scaffold erection and use.

**Policy**

Scaffolds shall be erected, moved, dismantled, or altered only under the supervision of a competent person and will have guardrails and toe-boards installed. When scaffolding hazards exist that cannot be eliminated, then engineering practices, administrative practices, safe work practices, Personal Protective Equipment (PPE), and proper training regarding Scaffolds will be implemented. These measures will be implemented to minimize those hazards to ensure the safety of employees and the public.

**Responsibilities**

It is the responsibility of each manager, supervisor, and employee to ensure implementation of Cirks Construction Inc. safety policy and procedure on Scaffolds. It is also the responsibility of each Cirks Construction Inc. employee to report immediately any unsafe act or condition to his or her supervisor. Specific responsibilities are found in Section 6.3.

**Procedure**

This section provides applicable definitions, establishes general provisions, and identifies specific responsibilities required by Cirks Construction Inc. safety policy and procedure on scaffolds.

**Definitions**

**Brace:** A tie that holds one scaffold member in a fixed position with respect to another member. Brace also means a rigid type of connection holding a scaffold to a building or structure.
**Coupler:** A device for locking together the component tubes of a tube and coupler scaffold.

**Harness:** A design of straps which is secured about the employee in a manner to distribute the arresting forces over at least the thighs, shoulders, and pelvis, with provisions for attaching a lanyard, lifeline, or deceleration device.

**Hoist:** A mechanical device to raise or lower a suspended scaffold. It can be mechanically powered or manually operated.

**Maximum Intended Load:** The total load of all employee, equipment, tool, materials, transmitted, wind, and other loads reasonably anticipated to be applied to a scaffold or scaffold component at any one time.

**Mechanically Powered Hoist:** A hoist which is powered by other than human energy.

**Outriggers:** The structural member of a supported scaffold used to increase the base width of a scaffold in order to provide greater stability for the scaffold.

**Platform:** The horizontal working surface of a scaffold.

**Safety Belt:** A strap with means for securing about the waist or body and for attaching to a lanyard, lifeline, or deceleration device.

**Scaffold:** Any temporary elevated or suspended platform and its supporting structure used for supporting employees or materials or both, except this term does not include crane or derrick suspended personnel platforms.

**Training**

Affected employees will receive instruction on the particular types of scaffolds which they are to use. Training should focus on proper erection, handling, use, inspection, and care of the scaffolds. Training must also include the installation of fall protection, guardrails, and the proper use and care of fall arrest equipment.

This training should be done upon initial job assignment. Retraining shall be done when job conditions change. Periodic refresher training shall be done at the discretion of the supervisor.

Company designated “competent person(s)” will receive additional training regarding the selection of scaffolds, recognition of site conditions, recognition of scaffold hazards, protection of exposed personnel and public, repair and replacement options, and requirements of standards.

**Safe Scaffold Erection and Use**

Safe scaffold erection and use is important in minimizing and controlling the hazards associated with their use. Scaffold work practices and rules should be based on:

- Sound design
• Selecting the right scaffold for the job
• Assigning personnel
• Fall protection
• Guidelines for proper erection
• Guidelines for use
• Guidelines for alteration and dismantling
• Inspections
• Maintenance and storage

Types of Scaffolds

There are many different types of scaffolds used. The three major categories are:

• Self-supporting scaffolds
• Suspension scaffolds
• Special use scaffolds

Self-supporting scaffolds are one or more working platforms supported from below by outriggers, brackets, poles, legs, uprights, posts, frames, or similar supports. The types of self-supporting scaffolds include:

• Fabricated Frame
• Tube and Coupler
• Mobile
• Pole

Suspension scaffolds are one or more working platforms suspended by ropes or other means from an overhead structure(s). The types of suspension scaffolds include:

• Single-Point Adjustable (Boatswain’s Chairs)
• Two-Point Adjustable (Swing Stage)
• Multiple-Point Adjustable
• Multi-Lend
• Category
• Float (Ship)
• Interior Hung
• Needle Beam

Special use scaffolds and assemblies are capable of supporting their own weight and at least 4 times the maximum intended load. The types of special use scaffolds include:

• Form and Carpenter Bracket
• Roof Bracket
• Outrigger
• Pump Jack
• Ladder Jack
• Window Jack
• Horse
- Crawling Boards
- Step, Platforms, and Trestle Ladder

Responsibilities:

Managers

Managers will ensure adequate funds are available and budgeted for the purchase of scaffolds in their areas. They will also identify the employees affected by this safety policy and procedure. Managers will obtain and coordinate the required training for the affected employees. Managers will also ensure compliance with this safety policy and procedure through their auditing process.

Supervisors

Supervisors will not allow any employee who has not received the required training to perform any of the tasks or activities related to scaffold erection or dismantling.

Supervisors will communicate appropriate needs to managers/unit heads or supervisors. Supervisors will ensure that employees are provided with PPE as necessary for their job. Supervisors will ensure that a competent person is in charge of scaffold erection according to the manufacturer's specifications.

Competent Person

The competent person will oversee the scaffold selection, erection, use, movement, alteration, dismantling, maintenance, and inspection. The competent person will be knowledgeable about proper selection, care, and use of the fall protection equipment. Additionally, the competent person shall assess hazards.

Employees

Employees shall comply with all applicable guidelines contained in this safety policy and procedure. Employees will report damaged scaffolds, accessories, and missing or lost components. Employees will assist with inspections as requested.

Safety Department

Safety and Loss Control will provide prompt assistance to managers, supervisors, or others as necessary on any matter concerning this safety policy and procedure. Safety and Loss Control will assist in developing or securing required training. Safety and Loss Control will also work with Purchasing and Central Equipment Unit to ensure that all newly purchased scaffolds comply with current safety regulations and this safety policy and procedure. Safety Engineers will provide consultative and audit assistance to ensure effective implementation of this safety policy and procedure.

Purchasing Department
Purchasing Department is responsible for ensuring that purchased scaffolds and related material and equipment meet or exceed current safety regulations.

**Safety Requirements for Scaffolds**

The footing or anchorage for scaffolds shall be sound, rigid, and capable of carrying the maximum intended load without settling or displacement. Unstable objects such as barrels, boxes, loose brick, or concrete blocks shall not be used to support scaffolds or planks.

No scaffold shall be erected, moved, dismantled, or altered except under the supervision of competent persons or as requested for corrective reasons by Safety and Loss Control Personnel.

Guardrails and toe-boards shall be installed on all open sides and ends of platforms more than 10 feet above the ground or floor, except needle beam scaffolds and floats. Scaffolds 4 feet to 10 feet in height having a minimum horizontal dimension in either direction of less than 45 inches shall have standard guardrails installed on all open sides and ends of the platform.

Guardrails must be 2 x 4 inches, or the equivalent, not less than 36 inches or more than approximately 42 inches high, with a mid-rail, when required, of 1 x 4 inch lumber, or the equivalent. Supports must be at intervals not to exceed 8 feet. Toe-board and the guardrail shall extend along the entire opening.

Scaffolds and their components must be capable of supporting without failure at least 4 times the maximum intended load.

Any scaffold, including accessories such as braces, brackets, trusses, screw legs, ladders, couplers, etc., damaged or weakened from any cause must be repaired or replaced immediately, and shall not be used until repairs have been completed.

All load-carrying timber members of scaffold framing shall be a minimum of 1,500 fiber (Stress Grade) construction grade lumber.

All planking must be Scaffold Grades, or equivalent, as recognized by approved grading rules for the species of wood used. The maximum permissible span for 2 x 9 inch or wider planks is shown in the following:

The maximum permissible span for 1-1/4 x 9 inch or wider plank of full thickness shall be 4 feet with medium duty.
Company Policy for Occupational Noise Exposure

It is a Cirks Construction Inc. safety policy for the prevention of employee exposure to hazardous levels of noise is adopted from the following OSHA regulations.

Occupational Noise Exposure

We have implemented this policy to ensure that no employee is exposed to noise levels in excess of the action levels as listed in the following regulations. The safety director and the superintendent are the designated supervisors for ensuring the following engineering controls and work practices will be enforced:

- Upon initial hiring, all employees who are exposed to action level noise will be trained in the hazardous presented by excessive noise levels in the workplace, and the use and care of hearing protection devices. Training will be repeated annually for each employee and updated to reflect changes in personal protective equipment (PPE) and work processes or requirements.

- Hearing protectors are available upon request from the safety director and the superintendent at no cost to all employees exposed to an 8 hour time-weighted average of 85 decibels. Hearing protections will be replaced as necessary. Each employee will be properly trained in the use, care, and fitting of hearing protectors. The safety director and the superintendent will ensure that hearing protectors are worn. Employees will be given the opportunity to select their hearing protectors from a variety of suitable hearing protectors.

- Cirks Construction Inc. will provide a continuing effective hearing conservation program when employees are exposed to sound levels greater than 85 decibels on an 8 hour time-weighted average basis.

- When information indicates that employee exposure may equal/exceed the 8 hour time-weighted average of 85 decibels, the safety director and the superintendent will implement a monitoring program to identify employees to be included in the hearing conservation program.

- Employees will be required to wear hearing protection in work areas whenever employee noise exposure equal or exceed an 8 hour time-weighted average sound level (TWA) of 85 decibels measured on the A scale (slow response) or, equivalently, a dose of fifty percent.

- The safety director and the superintendent will maintain an audiometric testing program by making audiometric testing available to all employees whose exposure equal or exceed an 8 hour time-weighted average 85 decibels. The program is provided at no cost to employees.

- Audio monitoring will be implemented if it is believed noise levels in work areas are approaching or exceed action level limits. If monitoring results indicate exposures equaling or exceeding safe limits, an employee will be included in a hearing conservation program.

- Within 6 months of an employee’s first exposure at or above the action level, Cirks Construction Inc. shall establish a valid baseline audiograms can be
compared. When a mobile van is used, the baseline shall be established within 1 year.

- Testing to establish a baseline audiogram will be preceded by at least 14 hours without exposure to workplace noise. Hearing protection may be used to meet the requirement. Employees will also be notified to avoid high levels of noise.

- If a standard threshold shift occurs, use of hearing protection shall be re-evaluated or refitted and if necessary a medical evaluation may be required. The following procedures will be implemented:
  - Employees not using hearing protectors will be fitted with hearing protectors, trained in their use and care, and required to use them.
  - Employees already using hearing protectors will be refitted and retrained in the use of hearing protectors and provided with hearing protectors offering greater attenuation if necessary.
  - Employees will be referred for a clinical audiological evaluation or an ontological examination, as appropriate, if additional testing is necessary or if it is suspected that a medical pathology of the ear is caused or aggrieved by the wearing of hearing protectors.
  - Employees will be informed of the need for an ontological examination if a medical pathology of the ear that is unrelated to the use of hearing protectors is suspected.

- The safety director and the superintendent will evaluate hearing protection for the specific noise environments in which the protector will be used.

- Hearing protection is available at no cost to all employees upon request from the jobsite foreman or company office.
Mandatory Safety Forms, Permits and Checklists
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### General

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<td>Tailgate Meeting Documentation</td>
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<td>Plans/Specs/ Drawings of job</td>
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### Job Hazard Analysis for Critical Work

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### Personal Protective Equipment (PPE)

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<tr>
<td>Cut Resistant Gloves</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Class II Vest</td>
<td>Respiratory Protection</td>
<td></td>
<td></td>
</tr>
<tr>
<td>---------------</td>
<td>------------------------</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

### FALL PROTECTION
- Site Specific Fall Protection Plan (SFPP) available for review
- Rescue Plan Completed
- Retrieval Method Available
- Equipment Inspection Conducted
- Fall Protection ABC’s followed
- Site Specific Fall Protection Plan (SFPP) available for review

### SCAFFOLDING WORK
- Daily Signed Green tag by Comp Person
- Plumb
- Base Plates & Mudsills
- Plank Size, spacing and construction
- Guardrails
- Access Ladder

### CRANE ACTIVITY
- KDC Crane Plan Followed
- JHA
- Pic Plan Completed
- Rigging Plan

### CONFINED SPACES
- JHA completed
- Confined Space Plan (CSP)
- Use of sniffer
- Attendant
- Entrant
- CP Permit
- JHA completed

### DIGGING
- Utility companies contacted and/or utilities located.
- Exact location of utilities marked when near excavation.
- Underground installations protected
- Precautions taken to protect employees from accumulation of water.
- Surface water controlled or diverted.
- Atmosphere tested
- Oxygen content is between 19.5% and 21%.
- Flammable gas build-up to 20% of lower explosive limit (LEL).
Toxic Levels of gases are below limits set on gas monitor.
Ventilation blowing into space and air intake placed away from vehicle exhaust

<table>
<thead>
<tr>
<th><strong>EXCAVATION/TRENDING/SHARING</strong></th>
<th>YES</th>
<th>NO</th>
<th>N/A</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pre-Excavation Report</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>JHA</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Soil Test – Type (circle one)ABC</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Protective device</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Atmospheric Testing</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Current Conditions N/A Description or Measure Comments / Observations</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Terrain, Weather, Water accumulation</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Traffic conditions</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Heavy equipment location</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Spills location</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Trench width</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Trench depth</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Access / egress conditions</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th><strong>ELECTRICAL</strong></th>
<th>YES</th>
<th>NO</th>
<th>N/A</th>
</tr>
</thead>
<tbody>
<tr>
<td>Lock Out Tag Out</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>JHA</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Tailgate Meeting</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th><strong>FLAMMABLE &amp; COMBUSTIBLE LIQUIDS</strong></th>
<th>YES</th>
<th>NO</th>
<th>N/A</th>
</tr>
</thead>
<tbody>
<tr>
<td>Stored and handled in appropriately container</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Labeled Correctly</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Right To Know Poster</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th><strong>MOBILE EQUIPMENT</strong></th>
<th>YES</th>
<th>NO</th>
<th>N/A</th>
</tr>
</thead>
<tbody>
<tr>
<td>Daily inspection conducted on all mobile equipment - documented</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Owner’s manual secured in all mobile equipment</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Seat belts functional and worn on mobile equipment (as required)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Proper attachments used on all mobile equipment</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
## Scaffold Safety Plan

A scaffold plan is required to be submitted for any large scaffold system or ones that have special configurations. This plan is not meant for standard scaffolds under 15’ tall or small mobile scaffolds.

<table>
<thead>
<tr>
<th>Contractor Erecting Scaffold:</th>
<th>Date of Erection:</th>
</tr>
</thead>
<tbody>
<tr>
<td>Contractor Using Scaffold:</td>
<td>Date of Dismantling:</td>
</tr>
</tbody>
</table>

### Training and Competent Person

<table>
<thead>
<tr>
<th>Trade(s) utilizing the scaffold:</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Competent Person Named for Scaffold Operations:</td>
<td></td>
</tr>
<tr>
<td>Credentials of Competent Person:</td>
<td>Please attach any training and certification documents to this plan</td>
</tr>
<tr>
<td>Name trained personnel on the scaffold erection crew:</td>
<td></td>
</tr>
</tbody>
</table>

### Basic Scaffold Information

<table>
<thead>
<tr>
<th>Type of scaffold to be erected (swing stage, welded frame, walkthrough, etc.):</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Width of scaffold frames:</td>
<td>Spacing between frames with bracing installed:</td>
</tr>
<tr>
<td>Height of completed scaffold:</td>
<td>Width of completed scaffold:</td>
</tr>
<tr>
<td>Working load capacity:</td>
<td>Will the scaffold be covered? With what?</td>
</tr>
</tbody>
</table>

### Tipping Restraint

<table>
<thead>
<tr>
<th>Manufacturer’s tipping moment of the scaffold:</th>
<th>Types of ties/bumpers will be used:</th>
</tr>
</thead>
<tbody>
<tr>
<td>Anchorage to be tied into for tipping restraint:</td>
<td>Horizontal frequency of ties:</td>
</tr>
<tr>
<td>Vertical frequency of ties:</td>
<td></td>
</tr>
</tbody>
</table>

### Planking

<table>
<thead>
<tr>
<th>Type(s) of planks to be used:</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Length(s) of planks to be used:</td>
<td>Number of planks to fully deck the scaffold:</td>
</tr>
<tr>
<td>Levels of scaffold to be planked at one time:</td>
<td>How will the planked sections be loaded?</td>
</tr>
</tbody>
</table>
## Access

<table>
<thead>
<tr>
<th>Scaffold access method(s):</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Total access heights:</strong></td>
<td><strong>How often will access be installed horizontally?</strong></td>
</tr>
<tr>
<td>Use of swinging gates, offset guardrails or other equivalent means:</td>
<td></td>
</tr>
<tr>
<td>Design and number of bridges/ramps to be erected between scaffolds or from building to scaffold:</td>
<td></td>
</tr>
</tbody>
</table>

## Fall Protection

| Means of fall protection while erecting/dismantling the scaffold: |  |
| Competent Person for fall protection if using Personal Fall Arrest Systems (PFAS): |  |
| List trained personnel if using PFAS: |  |
| Means of fall protection for scaffold end users: |  |
| Falling object protection method(s) to be used for the scaffold: |  |

## Footing and Foundations

| Type of scaffolding footing (baseplates, casters, etc.): |  |
| Dimensions of any mudsills to be used: |  |
| Describe any special foundations the scaffold may utilize (blocking, pads, etc.): |  |
| Will outriggers be used? | **If so, what dimensions?** |

**KDC Representative:** ____________________________  **Date:** __________

**Sub Representative:** ____________________________  **Date:** __________
SAFE WORK PRACTICES

- Each scaffold must be designed to support its own weight and 4 times the maximum load. See 1637(b) for maximum working loads.
- Scaffold erection and dismantlement must be supervised by a competent person. Scaffold must be erected and dismantled according to design standards, engineered specifications, or manufacturer’s instructions. 1637
- A Cal/OSHA permit is required for erecting and dismantling scaffolds that exceed three stories or 36 ft. in height. 341(d)(5)(B)
- A safe and unobstructed means of access, such as a walkway, stair, or ladder shall be provided to all scaffold platforms. 1637(n)(1)
- Anchorage and bracing shall be such that scaffolds and falsework will be prevented from swaying, tipping, or collapsing. 1637(c)
- Manufactured planks shall be able to support its weight plus 4 times the live load. 1637(f)(3)(A)
- Workers on scaffolds who are exposed to overhead hazards shall be provided with overhead protection or other means that will effectively eliminate the hazard. 1637(q)
- Platform must be at least 20" wide and shall not be sloped more than 2 to 10. Slippery platform conditions are prohibited. 1637(p)
- Guardrails must be installed on open sides and ends of platforms that are 6 ft. or higher. 1621(a)
- Toeboards are required on all railed sides of work surfaces where employees work or pass below. 1621(b)
## Crane Lift Plan

### Date of Lift:

<table>
<thead>
<tr>
<th>Subcontractor Name:</th>
<th>Project Name:</th>
<th>Lift Location:</th>
</tr>
</thead>
</table>

### Person Responsible for Plan/Contact Info:

<table>
<thead>
<tr>
<th>Name of Rigger/Signal Person:</th>
<th>Rigging Company Name:</th>
<th>Person Responsible for Plan/Contact Info:</th>
</tr>
</thead>
</table>

### Crane Information

<table>
<thead>
<tr>
<th>Make:</th>
<th>Model:</th>
<th>Size (Capacity in Tons):</th>
<th>S/N:</th>
</tr>
</thead>
</table>

### Date of Manufacture:

<table>
<thead>
<tr>
<th>Type</th>
<th>Has the Crane been Idle for Longer than 3 Months?</th>
</tr>
</thead>
<tbody>
<tr>
<td>☐ Hydraulic</td>
<td>☐ Yes ☐ No, A new annual 3rd Party Inspection Certification and report must be provided</td>
</tr>
<tr>
<td>☐ Friction</td>
<td>☐ No, (Note: Provide a copy of Annual 3rd Party Inspection Certification and report)</td>
</tr>
<tr>
<td>☐ Lattice</td>
<td>☐ Truck</td>
</tr>
</tbody>
</table>

### Crane Information

<table>
<thead>
<tr>
<th>Type</th>
<th>Has the Crane been Idle for Longer than 3 Months?</th>
</tr>
</thead>
<tbody>
<tr>
<td>☐ Hydraulic</td>
<td>☐ Yes ☐ No, A new annual 3rd Party Inspection Certification and report must be provided</td>
</tr>
<tr>
<td>☐ Friction</td>
<td>☐ No, (Note: Provide a copy of Annual 3rd Party Inspection Certification and report)</td>
</tr>
<tr>
<td>☐ Lattice</td>
<td>☐ Truck</td>
</tr>
</tbody>
</table>

### Length of Main Boom: | Jib Used? | Yes | No | Length: | Offset: |
|------------------|--------|-----|-----|---------|------|

### Loan Line # of Parts: | Line Pull: | lbs. | Block Capacity |
|--------------------------|----------|------|----------------|

### Maximum working radius of boom in feet:

<table>
<thead>
<tr>
<th>Maximum working radius of boom (plus ½ length of load) in feet:</th>
<th>Max Vertical Boom Elevation (including erected jib) in feet:</th>
</tr>
</thead>
<tbody>
<tr>
<td>Max working radius of boom (plus ½ length of load) in feet:</td>
<td>Max Vertical Boom Elevation exceeding 200’ above Existing Site Elevation?</td>
</tr>
<tr>
<td>☐ Yes ☐ No</td>
<td>☐ Yes ☐ No</td>
</tr>
</tbody>
</table>

### Will Max working radius of boom (including ½ length of load) be within 20’ of an Overhead Power Line?:

<table>
<thead>
<tr>
<th>☐ Yes ☐ No</th>
<th>Will Max Vertical Boom Elevation exceed 200’ above Existing Site Elevation?</th>
</tr>
</thead>
<tbody>
<tr>
<td>☐ Yes ☐ No</td>
<td>☐ Yes ☐ No</td>
</tr>
</tbody>
</table>

### If yes, Provide Power Line Voltage:

<table>
<thead>
<tr>
<th>If yes, Attach a JHA Outlining How Contact Hazard will be Mitigated – see Subpart CC.</th>
<th>If yes, Provide FAA Permit No. (attach a copy of the permit to the Crane Lift Plan):</th>
</tr>
</thead>
<tbody>
<tr>
<td>☐ Yes ☐ No</td>
<td>☐ Fully Extended ☐ Intermediate and Pinned ☐ Fully Retracted</td>
</tr>
</tbody>
</table>

### Will Crane Require Assembly On-site?:

<table>
<thead>
<tr>
<th>☐ Yes ☐ No</th>
<th>How will Outriggers be Configured?</th>
</tr>
</thead>
<tbody>
<tr>
<td>☐ Fully Extended</td>
<td>☐ Intermediate and Pinned ☐ Fully Retracted</td>
</tr>
</tbody>
</table>

### If yes, Provide Manufacturers Assembly / Disassembly Instructions, and JHA Outlining How this Activity will be Performed. (Note: A new annual 3rd party inspection certification and report must be provided post A/D) Exception: Hydraulic crane with stowed jib that was included in the current annual 3rd party inspection

<table>
<thead>
<tr>
<th>☐ Provide a Copy of Crane Dimensions and Area (Quadrant) of Operation Diagram</th>
<th>What is Max Imposed Operating Ground Pressure of Crane and Load in PSI with Cribbing (minimum of 3 times float area)?</th>
</tr>
</thead>
</table>

### Load Characteristics

<table>
<thead>
<tr>
<th>Will this crane lift plan cover multiple picks?</th>
<th>Description of Load(s):</th>
</tr>
</thead>
<tbody>
<tr>
<td>☐ Yes ☐ No</td>
<td>Maximum Load Characteristics (Provide information on both the HEAVIEST and the LARGEST volume load):</td>
</tr>
</tbody>
</table>

### Weight of Max Load (Provide manufactures product data sheets and / or calculations)

<table>
<thead>
<tr>
<th>Location of load Center of Gravity (Provide manufactures product data sheet and / or a sketch):</th>
<th>How will the Load Center of Gravity be determined:</th>
</tr>
</thead>
<tbody>
<tr>
<td>☐ Yes ☐ No</td>
<td>Will any load be upended? If so, provide stability evaluation from manufacturer or professional engineer:</td>
</tr>
</tbody>
</table>

### Rigging Information:

<table>
<thead>
<tr>
<th>☐ Yes ☐ No</th>
<th>List rigging components - be specific: manufacturer, number of pieces, description, size, length, capacity and component weight (NOTE: Job built equipment must be engineered and proof tested).</th>
</tr>
</thead>
<tbody>
<tr>
<td>☐ Yes ☐ No</td>
<td>Minimum Capacity Component (describe, and show capacity):</td>
</tr>
</tbody>
</table>

(Not: Provide a diagram for each rigging configuration)
### Itemization of Crane Chart Capacity Deductions

<table>
<thead>
<tr>
<th>Weight of Heaviest Load:</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Rigging:</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Jib:</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Jib Hook:</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Hook Block:</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
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</tbody>
</table>

<table>
<thead>
<tr>
<th>Load Line:</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
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</tbody>
</table>

<table>
<thead>
<tr>
<th>Other:</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Gross Deductions:</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
</tr>
</tbody>
</table>

### Crane Location/Clearances

- a. Provide a to-scale plot plan showing crane location, adjacent buildings, pipe racks, and other significant obstructions within load swing radius. Indicate direction and span of swing.

- b. Provide a to-scale elevation depicting crane, adjacent structures, and load.

- c. What is the horizontal distance from the crane center pin to the nearest structure?

- d. What is the minimum clearance from boom to highest point of structure during a pick?

- e. What is the minimum clearance from load to highest point of structure during a pick?

- f. What is the minimum distance from boom to load during a pick?

- g. Will the load or any part of the crane be over any active piping, tanks, or equipment during a pick? Please explain:

- h. Have underground site utilities been identified and located?

- i. Will outriggers be located over underground utilities? If so, please explain protective measures to be taken:

- j. Describe signaling procedure – who will be responsible for signaling? Will hand or radio signals be used?

### Attachments Provided (All must be checked):

- Plot Plan w/Crane Location (identify swing path, delivery truck location, location of overhead power lines, for example) Elevation Plan (utilize crane range diagram for example)

- Crane Charts (including any applicable Notes)

- Load Calculations

- Rigging Lists

- Rigging Diagram

- Operator’s License (copy)

- Operator's USDOT Medical Certificate

- OSHA 10 Hour (Note: in accordance with project requirements)

- Statement of Qualification and Competent Person Designation form for the crane operator to operate crane identified above.

- Statement of Qualification and Competent Person Designation form for A/D supervisor, rigger and signal person.

- 3rd Party Annual Inspection Report (Note: cranes erected on-site will require 3rd party inspection as erected)

### Be sure you have considered the following (all must be checked or marked N/A):

### The Following Items are in the Crane Cab:

- Hand Signal Chart

- Fire Extinguisher

- Complete Load Capacity Charts with Notes

- 3rd Party Annual Inspection Report

- State Crane License/Registration

- All other required paperwork, equipment

- Crane Lift Plan

### Be prepared to confirm the following additional items:

- Crane Configuration in Compliance with Lift Plan

- Maximum Radius Confirmed (MEASURED) Without Load

- Maximum Load Confirmed Prior to Achieving Maximum Radius

- Maximum Load Confirmed Prior to Achieving Maximum Radius

- Taglines to be Used
Be prepared to confirm the following additional items (continued from prior page):

<p>| | | | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Outrigger Floats &amp; Dunnage Installed (Minimum 3 times pontoon area, or crane capacity divided by 5.)</td>
<td>Outriggers Fully Extended Position: Computer Set at:</td>
<td>Lift Area and Equipment Inspected</td>
</tr>
<tr>
<td></td>
<td>Copy of the Demolition Plan in the Cab of Crane (if applicable)</td>
<td>Lift Plan and Crane Permit in Cab of Crane</td>
<td>Lift Plan and Crane Permit Reviewed with Rigging, Erection or Demolition Crew</td>
</tr>
</tbody>
</table>

Non-compliance with any part of this Crane Lift Plan will be grounds for immediate cessation of work and possible permanent removal from the site.

Crane Staging Diagram:

<p>| | | | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Crane Company Responsible Person</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Name</td>
<td>Signature</td>
<td>Phone Number</td>
<td></td>
</tr>
<tr>
<td>Subcontractor/Rigger Responsible Person</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Name</td>
<td>Signature</td>
<td>Phone Number</td>
<td></td>
</tr>
</tbody>
</table>

<p>| | | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>KDC Superintendent Name</td>
<td></td>
<td>Signature</td>
</tr>
<tr>
<td>KDC Safety Manager</td>
<td></td>
<td>Signature</td>
</tr>
</tbody>
</table>
**HOT WORK PERMIT**

Applicable to all operations involving welding and cutting equipment, and other hot work performed on site. The permit must be displayed at the work site and returned upon completion of work.

<table>
<thead>
<tr>
<th>Date:</th>
<th>Permit Number:</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Permission is given to (name):

<table>
<thead>
<tr>
<th>Of (Company):</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
</tr>
</tbody>
</table>

at (description of site):

<table>
<thead>
<tr>
<th>between</th>
<th>am/pm</th>
<th>and</th>
<th>am/pm</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Details of works to be performed:

**FIRE PREVENTION RULES**

Fire equipment to be provided as follows:

- Fire hose
- Fire extinguisher(s)
- Mandatory fire watcher

Combustible material located within 10 meters of the work must be removed or protected with non-combustible curtains, metal guards of flameproof covers.

Barricades, warning signs and spark/flash screens must be provided to protect other personnel in the area.

The work area, trenches, pits, etc. must be clear of flammable liquids, gases or vapors.

All floor and wall openings within 10 meters of the work being conducted must be covered to prevent transmission of sparks.

The hot work area and any adjoining areas must be patrolled from the start of work until 30 minutes after the work is completed (including rest periods).

Special conditions (describe):

**WORK ON ENCLOSED EQUIPMENT (Tanks, containers, ducts, etc.)**

1. The equipment must be cleaned of all combustibles.
2. Containers must be purged of all flammable vapors.

Signature of person issuing permit: 

<table>
<thead>
<tr>
<th>Signature</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
</tr>
</tbody>
</table>

**WORK COMPLETED AND AREA SAFE**

The work area has been inspected by the permit issuer 30 minutes after completion of work. No smoldering fires were discovered.

<table>
<thead>
<tr>
<th>Signature</th>
<th>Date</th>
<th>Time</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
## CONFINED SPACES

<table>
<thead>
<tr>
<th>Contract Name and Number:</th>
<th>Contractor/Subcontractor:</th>
</tr>
</thead>
<tbody>
<tr>
<td>Attendant:</td>
<td>Location:</td>
</tr>
<tr>
<td>Entrant:</td>
<td>Date:</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Question</th>
<th>Yes</th>
<th>No</th>
<th>N/A</th>
</tr>
</thead>
<tbody>
<tr>
<td>Has the site been evaluated for confined spaces by a designated competent person?</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Is a list of confined spaces maintained on site?</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Have all permit-required confined spaces (PRCS) been identified with a sign?</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Are confined spaces reevaluated whenever they or their characteristics change in a way that could lead to reclassification as a PRCS?</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Do the entrants, attendants, supervisors, and contractors fully understand their duties?</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Have all employees with potential entry into a PRCS been notified of the existence, location, and hazards of the space?</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Is there a written PRCS program?</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Has the designated authority developed and implemented a system for preparation, issuance, use, and cancellation of PRCS entry permits?</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Have plans and procedures been developed and implemented for summoning rescue and emergency services?</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Has the designated official developed and implemented procedures to coordinate entry operations when more than one work crew are authorized entry?</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Have all employees been instructed not to enter PRCSs without the proper permit and without following the procedures and practices outlined in the permit?</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Have employees required to enter PRCSs or act as an attendant or entry supervisor been trained to acquire the understanding, knowledge, and skills necessary for the safe performance of their assigned responsibilities and duties?</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Has each member of the on-site rescue team/emergency practiced making PRCS rescues at least once every 12 months?</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Has the off-site rescue/emergency service been informed of the hazards they may confront and been provided access to all permit spaces from which rescue may be necessary?</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Are retrieval systems or methods used whenever an authorized entrant enters a PRCS, unless the retrieval equipment would increase the overall risk of entry or would not contribute to the rescue of the entrant?</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Comments:
# Confined Space Entry Permit

**Permit #:**

**Shift:** 1st, 2nd, 3rd

**Permit Date:**

**Expires:**

### Location & Description of Space:

#### Purpose of Entry:

### Names of Trained, Authorized Individuals

- **Entry Supervisor:**
- **Entry Attendant:**
- **Authorized Entrants:**

### Emergency Contact Information

- **Emergency Responder:**
- **Contact Person:**
- **Phone #:**

### Pre-Entry Requirements

<table>
<thead>
<tr>
<th>Requirement</th>
<th>YES</th>
<th>NO</th>
<th>N/A</th>
</tr>
</thead>
<tbody>
<tr>
<td>Lockout/Tagout (De-energize)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Lines Capped, or Blanked</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Space Purged, Flushed, or Drained</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Ventilation (natural or mechanical)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Area Secured</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Non-Sparking Tools</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Communication method</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Escape Harness</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Lifeline</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

### Emergency Tripod

- **Emergency Tripod**

### Hotwork Permit (attach to Entry Permit)

- **Hotwork Permit**

### Fire Extinguisher

- **Fire Extinguisher**

### Respirator (type:)

- **Respirator**

### PPE

- **Hard Hat**
- **Gloves**
- **Safety Glasses**
- **Other PPE (type:)**
- **Other PPE (type:)**

### Space Monitoring Results

<table>
<thead>
<tr>
<th>Monitor at least every four hours</th>
<th>TEST 1</th>
<th>TEST 2</th>
<th>TEST 3</th>
<th>TEST 4</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Permissible Entry Levels</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Percent Oxygen</td>
<td>19.5% to 23.5%</td>
<td>Initial:</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Combustible Gas</td>
<td>Less than 10% LEL</td>
<td>Initial:</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

### Entry Authorization:

- **All actions for safe entry have been performed**

<table>
<thead>
<tr>
<th>Entry Supervisor</th>
<th>Date:</th>
<th>Time:</th>
</tr>
</thead>
</table>

### Permit Cancellation:

- **Entry has been completed and all entrants have exited space**

<table>
<thead>
<tr>
<th>Entry Supervisor</th>
<th>Date:</th>
<th>Time:</th>
</tr>
</thead>
</table>
# Excavation Safety Daily Inspection Checklist

<table>
<thead>
<tr>
<th>KDC Superintendent</th>
<th>Soil Type:</th>
</tr>
</thead>
<tbody>
<tr>
<td>Company Sub Name:</td>
<td>Excavation Depth:</td>
</tr>
<tr>
<td>Competent Person:</td>
<td>Excavation Width:</td>
</tr>
<tr>
<td>Site Address &amp; Job No:</td>
<td>Top Width Needed:</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Date:</th>
<th>Time:</th>
</tr>
</thead>
<tbody>
<tr>
<td>Weather Conditions:</td>
<td>Purpose of Trenching:</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Visual Soil Tests made:</th>
<th>If yes, what type?</th>
</tr>
</thead>
<tbody>
<tr>
<td>Manual Soil Test made:</td>
<td>If yes, what type?</td>
</tr>
</tbody>
</table>

## General Inspection of Jobsite

<table>
<thead>
<tr>
<th>YES</th>
<th>NO</th>
</tr>
</thead>
<tbody>
<tr>
<td>A)</td>
<td>Excavations, adjacent areas, and protective systems inspected by a competent person daily before the start of work.</td>
</tr>
<tr>
<td>B)</td>
<td>Competent person has the authority to remove employees from the excavation immediately.</td>
</tr>
<tr>
<td>C)</td>
<td>Surface encumbrances removed or supported.</td>
</tr>
<tr>
<td>D)</td>
<td>Employees protected from loose rock or soil that could pose a hazard by falling or rolling into the excavation.</td>
</tr>
<tr>
<td>E)</td>
<td>Hard hats worn by all employees.</td>
</tr>
<tr>
<td>F)</td>
<td>Spoils, materials, and equipment set back at least two feet from the edge of the excavation.</td>
</tr>
<tr>
<td>G)</td>
<td>Barriers provided at all remotely located excavations, wells, pits, shafts, etc.</td>
</tr>
<tr>
<td>H)</td>
<td>Walkways and bridges over excavations four feet or more in depth are equipped with standard guardrails and toeboards.</td>
</tr>
<tr>
<td>I)</td>
<td>Warning vests or other highly visible clothing provided and worn by all employees exposed to public vehicular traffic.</td>
</tr>
<tr>
<td>J)</td>
<td>Employees required to stand away from vehicles being loaded or unloaded.</td>
</tr>
<tr>
<td>K)</td>
<td>Warning system established and utilized when mobile equipment is operating near the edge of the excavation.</td>
</tr>
<tr>
<td>L)</td>
<td>Employees prohibited from going under suspended loads.</td>
</tr>
<tr>
<td>M)</td>
<td>Employees prohibited from working on the faces of slopes or benched excavations above other employees.</td>
</tr>
</tbody>
</table>

### 1. Utilities

<table>
<thead>
<tr>
<th>YES</th>
<th>NO</th>
</tr>
</thead>
<tbody>
<tr>
<td>A)</td>
<td>Utility companies contacted and/or utilities located.</td>
</tr>
<tr>
<td>B)</td>
<td>Exact location of utilities marked.</td>
</tr>
<tr>
<td>C)</td>
<td>Underground installations protected, supported, or removed when excavation is open.</td>
</tr>
<tr>
<td>D)</td>
<td>Photos have been taken of utility locates before excavation work begins or the utility locates have been documented on the plans.</td>
</tr>
</tbody>
</table>

## 2. Means of Access and Egress

<table>
<thead>
<tr>
<th>YES</th>
<th>NO</th>
</tr>
</thead>
<tbody>
<tr>
<td>A)</td>
<td>Lateral travel to means of egress no greater than 25 feet in excavations four feet or more in depth.</td>
</tr>
<tr>
<td>B)</td>
<td>Ladders used in excavations secured and extended three feet above the edge of the trench.</td>
</tr>
<tr>
<td>C)</td>
<td>Structural ramps used by employees designed by a competent person.</td>
</tr>
<tr>
<td>D)</td>
<td>Structural ramps used for equipment designed by a registered professional engineer (RPE).</td>
</tr>
<tr>
<td>E)</td>
<td>Ramps constructed of materials of uniform thickness, cleated together on the bottom, equipped with no-slip surface.</td>
</tr>
<tr>
<td>F)</td>
<td>Employees protected from cave-ins when entering or exiting the excavation.</td>
</tr>
</tbody>
</table>

## 3. Wet Conditions

<table>
<thead>
<tr>
<th>Condition*</th>
<th>Priority**</th>
</tr>
</thead>
<tbody>
<tr>
<td>A)</td>
<td>Precautions taken to protect employees from the accumulation of water.</td>
</tr>
<tr>
<td>B)</td>
<td>Water removal equipment monitored by a competent person.</td>
</tr>
<tr>
<td>C)</td>
<td>Surface water or runoff diverted or controlled to prevent accumulation in the excavation.</td>
</tr>
<tr>
<td>D)</td>
<td>Inspections made after every rainstorm or other hazard-increasing occurrence.</td>
</tr>
</tbody>
</table>
4. **Hazardous Atmosphere**

<table>
<thead>
<tr>
<th>Condition</th>
<th>Priority**</th>
</tr>
</thead>
<tbody>
<tr>
<td>A) Atmosphere within the excavation tested where there is a reasonable possibility of an oxygen deficiency, combustible or other harmful contaminant exposing employees to a hazardous condition.</td>
<td></td>
</tr>
<tr>
<td>B) Adequate precautions taken to protect employees from exposure to an atmosphere containing less than 19.5% oxygen and/or to other hazardous atmospheres.</td>
<td></td>
</tr>
<tr>
<td>C) Ventilation provided to prevent employee exposure to an atmosphere containing flammable gas in excess of 10% of the lower explosive limit of the gas.</td>
<td></td>
</tr>
<tr>
<td>D) Testing conducted often to ensure that the atmosphere remains safe.</td>
<td></td>
</tr>
<tr>
<td>E) Emergency equipment, such as breathing apparatus, safety harness and lifeline, and/or basket stretcher readily available where hazardous atmospheres could or do exist.</td>
<td></td>
</tr>
<tr>
<td>F) Employees trained to use personal protective and other rescue equipment.</td>
<td></td>
</tr>
<tr>
<td>G) Safety harness and lifeline used and individually attended when entering bell bottom or other deep confined excavations.</td>
<td></td>
</tr>
</tbody>
</table>

5. **Support Systems**

<table>
<thead>
<tr>
<th>Condition</th>
<th>Priority**</th>
</tr>
</thead>
<tbody>
<tr>
<td>A) Materials and/or equipment for support systems selected based on soil analysis, trench depth, and expected loads.</td>
<td></td>
</tr>
<tr>
<td>B) Materials and equipment used for protective systems inspected and in good condition.</td>
<td></td>
</tr>
<tr>
<td>C) Materials and equipment not in good condition have been removed from service.</td>
<td></td>
</tr>
<tr>
<td>D) Damaged materials and equipment used for protective systems inspected by a registered professional engineer (RPE) after repairs and before being placed back into service.</td>
<td></td>
</tr>
<tr>
<td>E) Protective systems installed without exposing employees to the hazards of cave-ins, collapses, or threat of being struck by materials or equipment.</td>
<td></td>
</tr>
<tr>
<td>F) Members of support system securely fastened to prevent failure.</td>
<td></td>
</tr>
<tr>
<td>G) Support systems provided in ensure stability of adjacent structures, buildings, roadways, sidewalks, walls, etc.</td>
<td></td>
</tr>
<tr>
<td>H) Excavations below the level of the base or footing supported, approved by an RPE.</td>
<td></td>
</tr>
<tr>
<td>I) Removal of support systems progresses from the bottom and members are released slowly as to note any indication of possible failure.</td>
<td></td>
</tr>
<tr>
<td>J) Backfilling progresses with removal of support system.</td>
<td></td>
</tr>
<tr>
<td>K) Excavation of material to a level no greater than two feet below the bottom of the support system and only if the system is designed to support the loads calculated for the particular shoring pursuant to the tabulated data sheets.</td>
<td></td>
</tr>
<tr>
<td>L) Shield system placed to prevent lateral movement.</td>
<td></td>
</tr>
<tr>
<td>M) Employees are prohibited from remaining in shield system during vertical movement.</td>
<td></td>
</tr>
</tbody>
</table>

6. **Training**

<table>
<thead>
<tr>
<th>Condition</th>
<th>Priority**</th>
</tr>
</thead>
<tbody>
<tr>
<td>A) All employees have had Excavation Safety Awareness Training.</td>
<td></td>
</tr>
</tbody>
</table>

**Miscellaneous Comments**
### EMERGENCY TELEPHONE NOTIFICATION NUMBERS

<table>
<thead>
<tr>
<th>Medical Clinic:</th>
<th>The Clinic</th>
</tr>
</thead>
<tbody>
<tr>
<td>Phone Number:</td>
<td>555-555-5555</td>
</tr>
<tr>
<td>Address:</td>
<td>1234 Scenic Drive, The City, CA</td>
</tr>
</tbody>
</table>

- **24 Hour Clinic?**
- **After Hour Location:**

If not a 24 hour clinic and incident happens after business hours, see below:

### IN CASE OF EMERGENCY – DIAL 911

<table>
<thead>
<tr>
<th>Fire</th>
<th>Phone Name</th>
<th>555-555-5555</th>
<th>City of Blank Fire Department</th>
</tr>
</thead>
<tbody>
<tr>
<td>Police</td>
<td>Phone Name</td>
<td>555-555-5555</td>
<td>City of Blank Police Dept</td>
</tr>
<tr>
<td>Utilities</td>
<td>Gas Name</td>
<td>So Cal Gas</td>
<td>555-555-5555</td>
</tr>
<tr>
<td>Utilities</td>
<td>Water Name</td>
<td>Water Company</td>
<td>555-555-5555</td>
</tr>
<tr>
<td>Utilities</td>
<td>Electric Name</td>
<td>Electric Company</td>
<td>555-555-5555</td>
</tr>
</tbody>
</table>

- **It is your responsibility to report incidents IMMEDIATELY!**

<table>
<thead>
<tr>
<th>Name</th>
<th>Phone Number</th>
</tr>
</thead>
<tbody>
<tr>
<td>Safety Manager</td>
<td>Stuart Nakutin</td>
</tr>
<tr>
<td>Project Manager</td>
<td></td>
</tr>
<tr>
<td>General Superintendent</td>
<td></td>
</tr>
<tr>
<td>Construction Manager</td>
<td></td>
</tr>
</tbody>
</table>

#### Triage
1. If injury can be treated with First Aid, then treat and report.
2. Transport to Medical clinic if injury is not treatable by First Aid.
3. **CALL 911 if EMERGENCY** and/or employee is not transportable.
INCIDENT & INJURY REPORTING

Whether you are supervising a job or performing a trade on a job, it is EVERYONE’S responsibility to report incidents and injuries IMMEDIATELY! It is not your decision to determine whether or not an incident or injury is serious enough to report; it is ours. We have to know about these matters as soon as they happen.

Your first call is to your immediate supervisor, and if you are unable to get a hold of that person, you call the next person in the chain of command. DO NOT send an email or a text; MAKE THE CALL IMMEDIATELY until you get a live person! If the injury is life threatening, your first call is always 911.

Northern California Construction Department Emergency Call Tree:
- 1st Call Immediate Supervisor; if unavailable
- 2nd Call Stuart Nakutin; Safety Director (714) 400-5023; if unavailable
- 3rd Call Dale Nelson; General Superintendent (916) 757-8342; if unavailable
- 4th Call Ryan Ferris; Construction Manager (916) 825-2062; if unavailable
- 5th Call Paul Spieckerman; General Manager (714) 231-6013; if unavailable
- 6th Call Office (916) 362-5460; ask for Cindra Henley at extension 303

Southern California Construction Department Emergency Call Tree:
- 1st Call Immediate Supervisor; if unavailable
- 2nd Call Stuart Nakutin; Safety Director (714) 400-5023; if unavailable
- 3rd Call Dave Funkhouser; General Superintendent (714) 470-4550; if unavailable
- 4th Call Matt Lanza; Construction Manager (714) 420-7148; if unavailable
- 5th Call Paul Spieckerman; General Manager (714) 231-6013; if unavailable
- 6th Call Office (714) 632-6717; ask for Cynthia Moye at extension 352

Maintenance Department Emergency Call Tree:
- 1st Call Dispatch (714) 685-1845, Option 1; if unavailable
- 2nd Call Stuart Nakutin; Safety Director (714) 400-5023; if unavailable
- 3rd Call Chat Goben; Safety Manager (714) 404-4760; if unavailable
- 4th Call Paul Spieckerman; General Manager (714) 231-6013; if unavailable
- 5th Call Office (714) 685-1845; ask for Cristina Polancic, (714 )457-1960

Please program these numbers in your phones. There are no excuses for not being able to get a hold of a live person. It is your responsibility to report these incidents IMMEDIATELY!

Thank you
SUPERVISOR'S INCIDENT & INVESTIGATION REPORT

This incident report is to be completed and signed by KDC's on-site supervisor. It should be completed fully, photographs taken and submitted without delay upon completion.

1. Describe the type of incident/accident:

2. Identify the location of the incident:

3. Explain (in as much detail as possible) how the incident/accident occurred:

4. Was the injured person or driver acting in regular line of duty? [ ] Yes [ ] No
   (If you selected other, explain below):

5. Did the injured worker leave work or the premises? [ ] Yes [ ] No
   Date: ____________________ Time: ____________________

Unsafe Act (what happened)

- Operating without authority; failure to secure or warn
- Operating or working at unsafe speed
- Making safety devices inoperative
- Using unsafe equipment, hands instead of equipment unsafely
- Failure to use safe attire or personal protective equipment
- Improper

Unsafe Conditions

- Improper guarding (unguarded, inadequately guarded, guard removal, etc.)
- Defective substances or equipment (broken, poorly designed, slippery, etc.)
- Hazardous arrangement (unsafe, piled material, poor layout, poor housekeeping, illegible markings, etc.)
- Improper dress or apparel (protective, gloves, shoes, masks, sleeves, etc.)
- Defective

If you selected other, please explain:

KDC Supervisor's Name: ____________________

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Steps Taken to Prevent a Recurrence

Unsafe Act:
- Instructed employee
- Warned employee
- Supplied safeguard
- Supplied proper equipment

Other action:

Unsafe Condition:
- Damaged condition
- Repaired condition
- Guarded machine
- Reported condition

Please identify who you reported to:

Other action:

6. List Employee who witnessed the incident. Prior to signing please acknowledge, "I have read the above statement and it is true"

   a. Phone: Signature:
   b. Phone: Signature:
   c. Phone: Signature:

7. List Non-Employee who witnessed the incident. Prior to signing please acknowledge, "I have read the above statement and it is true"

   a. Phone: Signature:
   b. Phone: Signature:
   c. Phone: Signature:

6. Occupational Accident, Injury, or Illness Investigation Report filed? ☐

6. Police report filed? ☐ Police report number:

10. Incident occurred during working hours? ☐

11. Is this a Workers’ Compensation issue? ☐

Employee Signature: ____________________________ Date: ____________

Supervisor’s Signature: ____________________________ Date: ____________