

APPENDIX H

PARSONS SAFE PRACTICE RULES

OBJECTIVE

The Safe Practice Rules in Table H-1 provide an overview of construction site safety requirements. These rules are not to be considered all-inclusive. For more specific information, refer to the relevant manual sections or OSHA requirements that pertain to specific areas of concern.

This information must be conveyed to all employees upon hire (during New Hire Safety Orientations) and during safety meetings. Failure to comply with these rules may result in termination.

Employees are required to sign a form acknowledging that they have read and understand these Safe Practice Rules (see Exhibit H-1), and that they are aware of the location where these rules are posted.

A copy of these Safe Practice Rules, along with a letter signed by the Construction Manager, must be posted where they are readily accessible to all employees.

See Exhibit H-2 for a copy of the Construction Manager Safe Practice Rules letter.

Table H-1 – General Safety Guidelines

Subject	Requirement
1. Work Planning	Plan work before starting a job. Planning prevents unnecessary exposure, job shutdowns, and rework.
2. Reporting Injuries and Accidents	Immediately report each occupational injury or illness to the site first aid attendant and to the responsible supervisor to ensure suitable first aid or medical attention. Immediately report all accidents involving damage to equipment and materials, including motor vehicle accidents, to the responsible supervisor. Immediately report all near-miss incidents that could have resulted in damage to equipment and materials to the responsible supervisor. The Near-Miss Report form appears in Exhibit 16-2.
3. Reporting Unsafe or Hazardous Conditions	Report unsafe or hazardous conditions to the responsible foreman or supervisor so that corrective action can be taken to prevent accidents.
4. Good Housekeeping	Good housekeeping on the job is mandatory. All employees must do their part to keep jobsites clean to ensure safety and efficiency. Never leave tools and materials where they could fall or cause another employee to face and incur injury. Promote good housekeeping through personal commitment, including proper disposal of lunch bags, bottles, and personal scrap.

Table H-1 – General Safety Guidelines (Contd)

Subject	Requirement
5. Personal Protective Devices	<p>The hard hats and nonprescription safety glasses with side shields provided for each employee must be worn at all times, except in the job office. Other protective equipment (goggles, respirators, face shields, metatarsal safety shoes, hearing protection and safety belts), are issued and used as required.</p> <p>Wear suitable work shoes in good repair. Steel-toed shoes are recommended. Sandals, athletic shoes, and other soft footwear may not be worn on the job.</p> <p>Wear a full-length shirt with at least 4-in. sleeves at all times on the jobsite. <i>Cutoffs and tank tops are not permitted.</i></p>
6. Alcohol and Narcotics	<p>Drinking intoxicants on the job is forbidden. Anyone reporting for duty under the influence of alcohol or narcotics will not be permitted to work, will be removed from the jobsite, and will be subject to termination.</p>
7. Sanitation	<p>Use the toilets provided.</p> <p>Do not use gasoline or kerosene for cleaning purposes.</p>
8. Horseplay or Fighting	<p>Practical jokes, horseplay, scuffling, wrestling or fighting are strictly prohibited.</p> <p>Running at any time on a project, including in parking areas, is strictly prohibited.</p>
9. Lifting	<p>When lifting, take a position over the load and lift with the leg muscles. Get help for heavy or awkward loads, or use a lifting device. Employees should not lift objects that weigh 50 lb or more unassisted by others or by lifting devices. Always use proper lifting techniques to lift any object.</p>
10. Starting and Operating Machines	<p>Do not start or operate mechanical equipment unless qualified and authorized to do so.</p>
11. Machinery and Tool Guards	<p>Machinery and tool guards on equipment protect against revolving or reciprocating parts. Such guards must be in place before a machine or tool is used and may not be removed or made inoperative.</p>
12. Scaffolds and Elevated Work Platforms	<p>Scaffolds must be substantially constructed to carry the loads imposed on them and to provide safe work platforms. All scaffolds more than 10 ft high must have approved guardrails on all exposed ends and sides. Toeboards and screens must be provided on any scaffold under which persons are required to pass.</p> <p>Scaffolds 4 to 10 ft high and less than 45 in. in width or length must have standard guardrails on all open sides.</p> <p>Use only approved scaffolds. Barrels, boxes, and other makeshift substitutes for scaffolds may not be used.</p> <p>Never lean against safety lines or guardrails.</p> <p>Throwing material from scaffolds or other high places is not permitted. Lock all wheels on manually propelled scaffolding before ascending. Never attempt to move a scaffold while someone is on the platform.</p>

Table H-1 – General Safety Guidelines (Contd)

Subject	Requirement
13. Ladders	<p>Use only approved ladders. Job-made ladders must be substantially constructed in accordance with approved designs. Portable straight or extension ladders must be placed at safe angles and secured to prevent displacement. The top of each ladder giving access to a work area or platform must extend at least 36 in. above the work area or platform.</p> <p>Barrels, boxes, chairs, or other substitutes may not be used.</p> <p>Do not climb or descend a ladder with anything in your hands.</p>
14. Excavations and Trenches	<p>Trenches in unstable or soft material 4 ft or more in depth must be shored or sloped in an approved manner.</p> <p>Trenches in hard, compact material must be shored or otherwise protected when 4 ft or more deep and 8 ft or more long.</p> <p>Sides of trenches may be sloped in lieu of shoring above the 4 ft level, but the slope may not be steeper than a 1 ft rise for each 0.5 ft horizontal.</p> <p>Ladders must be placed in each trench 3 ft deep or more where employees are working to provide safe exits from the trench. The lateral travel distance between ladders must be no more than 25 ft.</p> <p>Excavated or other material may not be stored nearer than 4 ft, where possible, and at no time closer than 2 ft from the edge of any excavation.</p> <p>Excavations and trenches must be inspected daily by a competent person. If there is evidence of slides or cave-ins, all work in an exposed area must cease until necessary precautions have been taken to ensure the protection of employees scheduled to work in the exposed area.</p>
15. Floor Openings, Holes, and Edges	<p>Protect floor openings or holes with approved guardrails or covers. Covers must be strong enough to support the loads imposed on them and secured to prevent accidental displacement.</p> <p>Guard the open edges of all floors 6 ft or more above the next floor or level using approved barricades secured to prevent accidental displacement. Guardrails and toeboards must also be provided.</p>
16. Hand Tools	<p>Turn in worn or broken hand tools for repair or replacement. Dull or broken tools are unsafe.</p> <p>Use hand tools for their intended purposes only. The design capacity of hand tools may not be exceeded by the addition of unauthorized attachments.</p>
17. Power Tools	<p>Ground electrically powered tools and equipment at all times when in use.</p> <p>Secure air hose connections to prevent accidental separation.</p> <p>Pressure reducing valves must be installed on all compressors to prevent injury in case of a break in the hose or a sudden disconnect.</p> <p>Do not tamper with operating switches or levers requiring constant pressure for operation to make tools operate without constant hand or finger pressure.</p> <p>Grinding wheel speeds must conform to manufacturers' specifications.</p> <p>Never point compressed air tools or hose nozzles at persons.</p> <p>Report and turn in all defective power tools and equipment for repair.</p>

Table H-1 – General Safety Guidelines (Contd)

Subject	Requirement
18. Explosive-Actuated Tools	<p>Only authorized and properly-trained employees may use explosive-actuated tools. All such tools must be used in accordance with manufacturers' instructions and applicable regulations.</p> <p>Operators must wear approved safety goggles at all times during operations of such tools.</p>
19. Hazardous Energy	<p>Obey all warning tags. Be alert for electrical lines, hot rails, pipe lines, etc.</p> <p>On any work on electrical or otherwise energized systems (for example, pneumatic or hydraulic), the person doing the work and the task supervisor are responsible for lockout and tagout of switches, valves, and like components (after proper arrangements have been made) and for removing the lock and tag after the work is completed.</p>
20. Electrical	<p>Do not use electrical tools or cords unless they have been tested for assured grounding or are used in conjunction with a ground fault circuit interrupter (GFCI).</p> <p>Use only Underwriters' Laboratories (UL) approved electrical extension cords. All extension cords must be properly grounded. Damaged or inoperative cords must be turned in immediately for repair or replacement.</p> <p>Route or elevate electrical cords to avoid damage to cords and tripping hazards.</p> <p>Always handle electrical equipment as though it is alive.</p>
21. Welding	<p>Connect and splice welding cables in an approved manner. No exposed metal parts are allowed in any splice.</p> <p>Route welding cables to avoid damage to cords and tripping hazards.</p> <p>Hang or route lines and hoses so that they do not present a tripping hazard or otherwise jeopardize personnel safety.</p> <p>Use welding blankets or burn blankets where there is a fire hazard or where employees could be subject to hot sparks or falling slag.</p>
	<p>Valve cover caps must be in place and cylinders secured from falling at all times.</p> <p>Place spent welding rods in suitable waste containers.</p> <p>Use flash shields in areas where others might be exposed to welding arcs or sparks.</p> <p>Check weld leads for bare spots at all times.</p> <p>A suitable fire extinguisher must be available for welding or cutting operations.</p> <p>Use proper eye protection.</p> <p>When arc welding, ensure that equipment and the work is properly grounded.</p> <p>Place flashback valves on fuel gas systems at the regulator.</p>
22. Temporary Electric Power	<p>Assume that all temporary electric power lines are energized and use appropriate precautions in handling them.</p> <p>All temporary power equipment must be properly guarded.</p>

Table H-1 – General Safety Guidelines (Contd)

Subject	Requirement
23. Gas Cylinders	<p>Gas cylinders must be upright when in use, secured to prevent falling, and protected from extreme heat and from being struck by moving equipment and falling objects.</p> <p>When transporting gas cylinders by crane, hoist, or derrick, use suitable cradles, nets or skip boxes. Never use wire or fiber ropes, webs or chain slings, or dragging. Remove regulators before transporting gas cylinders for reattachment in place.</p> <p>Never store oxygen cylinders near highly combustible materials, especially oil and grease, or near fuel gas cylinders.</p> <p>Replace caps on cylinders after each use.</p> <p>Store compressed gas cylinders in designated areas that have appropriate cautionary signage.</p> <p>Store unlike compressed gases separately.</p>
24. Explosion and Gas Hazard	<p>Do not attempt work involving a source of ignition near pits, manholes, open sewers, drain vents, pipe trenches, or enclosed spaces where flammable vapors might be present, until such areas have been tested with an approved hydrocarbon vapor detector, and the atmosphere is found to be safe for hot work.</p> <p>At similar locations where toxic gases might be present, such areas must first be tested with an approved toxic gas detector. No work may be performed until toxic gas concentrations are found to be lower than the maximum permissible level for the gas or gases being detected, or until approved protective measures have been taken.</p> <p>In areas where flammable or toxic vapors or gases might be present, no work may be performed until a job task analysis has been approved. The Site Safety Manager approves the area and procedure.</p>
25. Fire Prevention and Control	<p>All employees must comply with Fire Prevention and Control Procedures in this manual.</p> <p>Open fires are strictly prohibited.</p> <p>Learn where fire extinguishers are located and how to use them.</p> <p>Observe and obey all no smoking and other warning signs.</p>
26. Temporary Heaters	<p>Temporary heaters must have pilot and automatic valves that shut off and prevent fuel flow when pilots are unlit or go out.</p> <p>Only authorized personnel may install, service, and relocate temporary heaters. Installation, service and relocation must be in accordance with manufacturers' instructions, the Fire Prevention and Control Procedures, and any other applicable regulations.</p> <p>The use of makeshift heaters is not permitted.</p> <p>Only cool shell heaters may be used inside buildings.</p> <p>When temporary heaters are used indoors, ensure that adequate ventilation is provided to prevent dangerous concentrations of carbon monoxide.</p>

Table H-1 – General Safety Guidelines (Contd)

Subject	Requirement
27. Fueling Equipment	<p>No gasoline or diesel engine may be fueled while it is running.</p> <p>Use only approved metal safety fuel cans for refueling cans. Approved fuel cans have a flash arresting screen, a spring closing lid, and a spout cover that ensures safe relief of internal pressure if a can is exposed to fire.</p> <p>No smoking or open flames are permitted within 25 ft of fuel storage tanks, fuel pumps, or refueling operations.</p> <p>Fuel storage tanks must be properly grounded. Such electrical grounds may not be removed without authorization.</p> <p>Fire extinguishing equipment must be available in adequate volume and type to handle the special hazards inherent in the storage and operation of fueling equipment.</p> <p>Fuel storage areas must be graded or surrounded by a curb at least 6 in. high to divert spills from buildings or other exposures. Curbs must be provided with drains to control accumulations of rain and fuel.</p>
28. Vehicle Operation	<p>Vehicle drivers and operators of rubber-tired construction equipment must comply with jobsite speed limits and traffic control procedures.</p> <p>No vehicle with an obstructed rear view may be operated in reverse unless an observer is available to signal that it is safe to do so. All vehicles with obstructed rear views must have operating backup alarm signals that are audible above surrounding noise levels.</p> <p>No employee may be transported in a vehicle unless approved seating is available.</p> <p>Do not operate equipment unless authorized to do so.</p> <p>Vehicle drivers must obey all laws and regulations governing their use.</p> <p>Loads on trucks, tractors, and buggies must be safely secured before such vehicles are moved.</p> <p>Beware of machinery or equipment that can start up at any time while personnel are working nearby.</p> <p>All loads protruding more than 12 in. beyond the end of pickup and flatbed trucks must be properly flagged.</p> <p>Be alert to changes in road conditions and traffic patterns (intersections).</p> <p>Do not allow employees to jump from a moving vehicle. Vehicles must come to a complete stop before riders may board or leave them.</p> <p>Report any and all defects on trucks, etc., immediately to the truck foreman.</p> <p>Allow 3 persons maximum in the cab of a truck.</p> <p>Any personnel being transported in the back of a pickup truck must sit down in the bed; they may not sit on the side rails.</p> <p>Do not allow employees to sit on loads such as crates, boxes, or barrels.</p>

Table H-1 – General Safety Guidelines (Contd)

Subject	Requirement
29. Crane Operation	<p>The Construction Manager or authorized designate must review the operations of a crane when that crane must be operated in the vicinity of an overhead power line and any part of the crane could come within 10 ft of the overhead line. The review must be done before a crane is moved to an exposed area.</p> <p>The Construction Manager or authorized delegate must review the operations of a crane before any lift that exceeds 80% of the rated capacity for the radius of the crane boom. The review must be documented in accordance with procedures established by Parsons.</p> <p>Outriggers must be used at all times, except when a crane is traveling. If a crane is traveling with a load, every reasonable effort must be made to keep the outriggers extended as far as practical to avoid overturning potential.</p> <p>Hoisting employees in personnel platforms may only be performed when conventional means of accessing the work area are not possible.</p> <p>Hand signals to crane or derrick operators must be those prescribed by the American National Standards Institute (ANSI) standard for the type of crane in use. A poster illustrating the signals must be posted at the jobsite. Appendix K also shows the ANSI hand signals.</p> <p>Overhead lines that encroach on a work area must be marked with caution signs, 6 ft above ground level.</p> <p>Rigging and boom changes must be made by competent mechanics under the supervision of qualified supervisors.</p> <p>Do not walk or work underneath suspended loads.</p> <p>Use tag lines for all loads.</p> <p>Never ride material hoists, headache balls, hooks, or loads. Employees who do so are subject to immediate termination.</p> <p>Operators are responsible for checking their machines before starting work. Any defects of equipment or parts must be reported immediately to the appropriate foreman and mechanic.</p> <p>Outrigger pads must be set on solid foundations before lifts are made.</p> <p>Inspect all load lines, boom lines, etc. before starting work. Any cuts, broken wires, or serious kinks must be reported immediately to the appropriate foreman and repaired before each use as required.</p>

Table H-1 – General Safety Guidelines (Contd)

Subject	Requirement
	<p>The swing radius of all articulating equipment must be guarded to prevent individuals from being struck. Also, employees must take care not to enter the swing radius of articulating equipment.</p> <p>Do not talk to any other person while making lifts. Operators cannot afford to be distracted.</p> <p>Require that cherry pickers have all loads attached to a tag line back to the machine to prevent movement.</p> <p>Do not allow other workers to ride on the sides of cherry pickers.</p> <p>If improper signals are being given or cannot be seen, operators must secure the load and wait for a competent person to provide the signals. Operators also have the authority to ensure that hand signals are visible.</p> <p>Operators may not move compressed gas cylinders unless the caps are in place and the cylinders are secured in proper carrying racks.</p>
30. Rigging	<p>All rigging equipment must be checked for defects daily.</p> <p>Cable clips must be installed according to OSHA requirements.</p> <p>Use softeners on all wire rope to prevent the cable being cut on beam flanges or other potentially damaging objects.</p>
31. Material Handling	<p>Railroad cars must be balanced when unloading progressively from one side.</p> <p>Do not use shake-out hooks for hoisting or other rigging work. They should be used only for sorting.</p> <p>Do not overload skip boxes so that materials fall out while loads are being raised or landed.</p> <p>Use tag lines when hoisting loads.</p> <p>Pile or stack materials safely and use blocking to support the piles and stacks.</p>

Table H-1 – General Safety Guidelines (Contd)

Subject	Requirement
<p>32. Confined Space Work</p>	<p>A job task analysis and an entry permit must be approved prior to any confined space work or entry into any confined space.</p> <p>Preparatory precautions for confined space work include:</p> <ul style="list-style-type: none"> • Blinding any potential release sources of hazardous materials • Locking and tagout any hazardous energy or mechanical hazard sources • Purging and cleaning • Introducing fresh air and ventilation • Being familiar with the job hazards • Barricading the area <p>All employees working in confined spaces must wear safety harnesses with lifelines if there is potential for toxic, flammable, and oxygen-deficient atmospheres, or if there are engulfment or fall hazards.</p> <p>All employees must be trained in confined space work.</p> <p>If you are unsure about anything, ask. Your life depends on it.</p> <p>Never enter a confined space without going through the Parsons Entry Procedure. If you see someone in a confined space who appears to be injured or unconscious, contact rescue personnel. Many unfortunate accidents occur when employees enter confined spaces to help a fellow employee.</p>
<p>33. Hazard Communication</p>	<p>All employees must be familiar with the written hazard communication program that describes how to handle and use everyday construction chemical materials.</p> <p>The HAZCOM program must include the following:</p> <ul style="list-style-type: none"> • Labeling of containers • How to read material safety data sheets • How and where to obtain chemical information • How employees will be trained <p>Always read labels prior to using chemicals. If you want more information, refer to the MSDS. If you are still not sure how to use a chemical, ask your foreman. Remember: Never use a chemical material unless you have been trained in its use.</p> <p>Always label all chemical containers.</p> <p>Do not use chemicals from containers that do not have labels.</p> <p>You have the right to know about the chemicals you use. Exercise that right.</p>

The Safety Practice Rules in Table H-2 apply to specific crafts employed by Parsons. These rules are for personal safety, and all employees are expected to abide by them at all times.

Table H-2 – Craft Specific Safety Guidelines

Subject	Requirement
<p>1. Boilermakers</p> <p>Eye Protection</p> <p>Safety Belts</p> <p>Lifting</p>	<p>Full eye and face protection must be worn when machines or operations present potential eye or face injuries (grinding, cutting, or welding). Such protection includes face shields and safety glasses when grinding and cutting, or welding hood and safety glasses when welding.</p> <p>Safety belts shall be used when:</p> <ul style="list-style-type: none"> • Guardrails cannot be erected around scaffolds. • Elevated work platforms are more than 4 ft high and less than 45 in. wide. • Independent lifelines with rope grabs are required for employees working on boatswain chairs, swing stages, or other types of suspended scaffolds. • Employees working on floats must tie off to independent lifelines (not floats) with rope grabs, or to substantial building structures. <p>Request assistance to lift any item that is either too large or too heavy to be handled by one person.</p> <p>To lift loads properly, bend your legs, keep your back straight, and lift by straightening your legs. Refrain from putting stress on your back.</p>
<p>2. Carpenters</p> <p>Safety Belts</p>	<p>Safety belts or harnesses must be used when erecting, dismantling, or working on scaffolding not otherwise equipped with appropriate fall protection, or</p> <ul style="list-style-type: none"> • When sides and ends are more than 6 ft high. • When scaffolds are 4 ft to 9 ft high, are less than 45 in. in length or width, and are not equipped with handrails. • When working in boatswains chairs, swing stages, etc. In these instances, each safety belt must be attached to a separate lifeline with rope grabs.

Table H-2 – Craft Specific Safety Guidelines (Contd)

Subject	Requirement
Tools	<p>Inspect all hand tools for defects such as cracked hammer handles that could cause injury.</p> <p>Electrical power tools must be properly grounded.</p> <p>Guards must be kept in place on all power equipment at all times.</p> <p>Nails protruding from lumber must be removed or bent over to avoid catching clothing or suffering injury.</p> <p>All scaffolds must be built in accordance with OSHA requirements.</p> <p>Power-actuated tools must be operated only by competent persons. These persons should carry a certification card stating that they know and understand all rules for the safe operation of power tools.</p>
3. Cement Finishers	<p>Use appropriate care so that bags of lime or cement do not burst during handling.</p> <p>Cement masons should use personal protective equipment as follows:</p> <ul style="list-style-type: none"> • Wear suitable clothing to protect all parts of the body from burns. Do not wear clothing that has become stiff and hard with cement. Such clothing can irritate skin and cause infections. • Wear required goggles or face shield and safety glasses when grinding, drilling, chipping, or brushing concrete. • Wear respirators with approved filters and eye protection when working in excessive concentrations of dust. • Wear rubber boots in good condition when working in concrete. Water mixed with cement will cause serious burns. • Wear hard hats at all times. <p>Use protective skin cream on the hands, face and other exposed parts of the body to prevent or alleviate cement or lime burns. Personal cleanliness and frequent washing with soap and water is the best preventive.</p> <p>Store lime in a dry place. There is danger of fire when lime becomes damp and slaked.</p>

Table H-2 – Craft Specific Safety Guidelines (Contd)

Subject	Requirement
<p>4. Electricians</p>	<p>Electrical work must be done “cold” in preference to doing it under hot, or power on, conditions.</p> <p>Always handle electrical equipment as though it is alive.</p> <p>Lay only heavy-duty cords on the ground. It is recommended that all cords be elevated above or routed around the working or traffic area.</p> <p>Take no risks. Always assume voltage is high enough to cause physical injury.</p> <p>Warn others in a work area of any potential electrical hazard.</p> <p>Before closing a switch, review the circuit and why the switch is open. Be sure nobody can be injured when the switch is closed.</p> <p>Before beginning repairs on motors or circuits, first remove fuses from the starting box or switch, and place a danger tag and lock on the switch as a warning that repairs are in process. Switches should be locked open in accordance with the Parsons lockout/tagout procedure in Section 10 of the Parsons Health and Safety Manual. After work is completed, remove the tag and lock and replace all protective equipment.</p> <p>Never leave any electrical job unattended unless it is in safe condition for others.</p> <p>Take extra precautions in places that might be occasionally or constantly wet. For example,</p> <ul style="list-style-type: none"> • Use no bare wires. • Ensure that light sockets are nonmetallic. <p>Ensure that switches are enclosed, safety-type, and grounded.</p> <p>Temporary lighting must be used to provide sufficient illumination for safe working conditions.</p> <p>All temporary electrical circuits must be periodically inspected and properly maintained.</p> <p>Never use a fuse or breaker heavier than the capacity of the circuit.</p> <p>Never bridge a fuse or breaker.</p> <p>When removing fuses, use regular insulated fuse pullers.</p>
<p>5. Iron Workers</p> <p>Personal Protection</p>	<p>Face shields and safety glasses must be worn at all times when cutting, welding, or grinding.</p> <p>Wear safety belts when:</p> <ul style="list-style-type: none"> • Guard rails are not available on the scaffold unit. • Elevated work platforms are over 4 ft. high and less than 45 in. wide. • Independent lifelines with rope grabs are required for persons working from boatswain chairs and swing scaffolds. • Employees working on floats must tie off to independent lifelines with rope grabs, or to an independent substantial building structure. • Wear hearing protection when required.

Table H-2 – Craft Specific Safety Guidelines (Contd)

Subject	Requirement
Cleanup Placing of Concrete	<p>Cleanup crew members should wear steel-toe shoes and gloves.</p> <p>Wear rubber boots and gloves at all times when placing concrete.</p> <p>Be alert at all times for incoming concrete buckets and backing concrete trucks.</p>
<p>7. Millwrights</p> <p>Eye Protection</p> <p>Equipment</p> <p>Flammable Materials</p> <p>Welding</p>	<p>Full eye and face protection must be worn when machines or operations present eye or face injury hazards (grinding, cutting, and welding).</p> <p>Employees must use respirators when subjected to dust, fumes, gases, etc., in sufficient quantities to create a hazard or endanger safety.</p> <p>All tools must be in safe working condition.</p> <p>Bench grinders must have proper guards in place at all times.</p> <p>Hang lines and hoses so that they do not present tripping hazards or otherwise jeopardize personnel safety.</p> <p>Secure compressed gas cylinders in the upright position at all times. Compressed gas cylinders must be stored in accordance with Parsons policy on compressed gas storage, subsection 13.3 of the Parsons Health and Safety Manual.</p> <p>Store all flammable or combustible liquids in approved containers.</p> <p>Oily or flammable rags and waste must not be allowed to accumulate and must not be stored in closed spaces.</p> <p>Use flash shields in areas where others are subject to weld arcs or sparks.</p>
<p>8. Operators</p>	<p>Operators are responsible for checking their machines before starting work. Any defects of equipment or parts must be reported immediately to the appropriate foreman and mechanic.</p> <p>Outrigger pads must be set on solid foundations before lifts are made.</p> <p>Inspect all load lines, boom lines, etc. before starting work. Any cuts, broken wires, or serious kinks must be reported immediately to the appropriate foreman and repaired before each use as required.</p> <p>The swing radius of all articulating equipment must be guarded to prevent individuals from being struck. Also, employees must take care not to enter the swing radius of articulating equipment.</p> <p>Do not talk to any other person while making lifts. Operators cannot afford to be distracted.</p> <p>Require that cherry pickers have all loads attached to a tag line back to the machine to prevent movement.</p> <p>Do not allow other workers to ride on the sides of cherry pickers.</p> <p>If improper signals are being given or cannot be seen, operators must secure the load and wait for a competent person to provide the signals. Operators also have the authority to ensure that hand signals are visible.</p> <p>Operators may not move compressed gas cylinders unless the caps are in place and the cylinders are secured in proper carrying racks.</p>

Table H-2 – Craft Specific Safety Guidelines (Contd)

Subject	Requirement
<p>9. Pipefitters</p> <p>Eye and Face Protection</p> <p>Safety Belts</p> <p>Welding</p> <p>Rigging</p>	<p>Wear safety glasses with side shields at all times.</p> <p>Wear flash glasses with side shields at all times while working with a welder.</p> <p>Wear face shield and safety glasses when performing operations such as grinding.</p> <p>Use respirators when subjected to fumes, dust or mists, gases, or vapors in sufficient quantity to endanger safety.</p> <p>Safety belts shall be worn when:</p> <ul style="list-style-type: none"> • Guard-rails cannot be erected around scaffolds. • Elevated work platforms are more 4 ft high and less than 45 in. wide. • Independent lifelines with rope guards are required for employees working on boatswains chairs and swing stage scaffolds. <p>Hang or route lines and hoses so that they do not present a tripping hazard or otherwise jeopardize personnel safety.</p> <p>Use welding blankets or burn blankets where there is a fire hazard or where employees could be subjected to hot sparks, slag, or open flame.</p> <p>Check weld leads for bare spots at all times.</p> <p>Place spent welding rods in suitable containers.</p> <p>Protect cylinders from sparks, slag, or open flame.</p> <p>Use flash shields in areas where others are subject to weld arc and sparks.</p> <p>Check all rigging equipment for defects daily.</p> <p>Cable clips must be installed according to OSHA requirements.</p> <p>Use cable softeners on all wire rope to prevent the cable being cut on beam flanges and other potentially damaging objects.</p>
<p>10. Teamsters</p> <p>General</p>	<p>All loads must be secured from movement (shifting) while trucks are moving.</p> <p>Observe all speed limit signs on a project.</p> <p>Do not operate vehicles in reverse without clear vision to the rear, or without guidance from an observer stationed behind the vehicles.</p>
<p>Warehouse and Material Checkers</p>	<p>All cargo must be placed, not thrown, in the back of a pickup.</p> <p>Do not move any loads that are not well secured from movement.</p> <p>Stack materials so that they cannot fall over.</p> <p>To prevent back injuries, observe correct lifting procedures while handling materials.</p>

Table H-2 – Craft Specific Safety Guidelines (Contd)

Subject	Requirement
<p>11. Welders</p> <p>General</p> <p>Eye Protection</p> <p>Storage and Use of Cylinders</p>	<p>A suitable fire extinguisher or other effective means of fire extinguishing must be ready for instant use in any location where welding or cutting is to be performed.</p> <p>Screens, shields, or other suitable safeguards must be provided for the protection of employees or of combustible materials below or otherwise exposed to sparks or falling objects.</p> <p>The ground for a welding circuit must be mechanically strong and electrically adequate for the service required. Never ground through a pump or other rotating equipment.</p> <p>Electrode and ground cables must be supported and must not obstruct the safe passage of workers.</p> <p>Where several lengths of cable must be coupled into a welding circuit, use insulated cable connectors on both the ground line and the electrode holder line if occasional coupling or uncoupling is necessary.</p> <p>Always use an electrode holder of adequate rated current capacity, insulated to protect operators against possible shock and to prevent a short or flash when laid on grounded material.</p> <p>When arc welding is performed near others, use screens or adequate individual eye protection to protect from arc rays.</p> <p>Welding operators and helpers must use eye protective devices such as welding shields or helmets and goggles at all times.</p> <p>Keep cylinders away from all heat sources. Inside buildings, keep cylinders away from highly combustible materials such as oil, and from stoves, radiators, or furnaces.</p> <p>Cylinders must be stored in well-marked assigned areas away from elevators, gangways, or other places where they may be knocked over or damaged by passing or falling objects. Do not store cylinders of unlike gases together. Do not store oxygen cylinders in close proximity to acetylene cylinders or other fuel gas inside buildings.</p> <p>In the open, store cylinders where they are protected from accumulations of ice and snow and from continuous direct sunlight. Keep oxygen cylinders separated from fuel gas cylinders or combustible materials a minimum of 20 ft, or by using a noncombustible barrier at least 5 ft high, with a fire resistance rating of at least 30 minutes. Noncombustible barrier materials include steel plates, concrete walls, and concrete blocks.</p> <p>The valves on empty cylinders must be closed. Valve protection caps must be in place except when cylinders are in use or are connected for use. Cylinders must be connected to be in use.</p>

Table H-2 – Craft Specific Safety Guidelines (Contd)

Subject	Requirement
	<p>When using a crane to move cylinders, use a cradle, boat, or suitable cage. Do not use slings or hooks. Valve protection caps must always be in place during moves.</p> <p>Move cylinders by tilting and rolling them on their bottom edge; avoid dragging and sliding. When using a hand truck, ensure that cylinders are secure and in position. Never drop cylinders or permit them to strike one another violently. Do not use cylinders as rollers or supports even when empty.</p> <p>Use a suitable cylinder truck, chain, or other secure fastening to hold cylinders upright and in place while in use.</p> <p>Unless cylinders are secured on a special truck, remove regulators and ensure that valve protection caps are in place before cylinders are moved.</p> <p>Keep cylinders far enough away from welding or cutting operations to prevent sparks, hot slag, or flame reaching them. Otherwise, use fire resistant shields.</p> <p>For storing gas cylinders containing in excess of 2,000 cubic feet gas total, provide a separate room or compartment, store cylinders outside, or store them in a special building. Any special buildings, rooms, or compartments must not use open flame for heating or light, must be well ventilated, and must not be used for any other purpose. Smoking is not permitted in gas cylinder storage rooms. Use cylinder carts to transport gas cylinders from storage facilities to their place of use.</p> <p>The fusible safety plugs provided on all acetylene cylinders melt at about 212°F (100°C), or the boiling point of water. Should the outlet valve become clogged with ice, thaw it with warm, not boiling, water applied only to the valve. Never use flame or steam to thaw ice accumulations in a valve.</p> <p>Store and use acetylene and liquefied fuel gas cylinders with the valve end up. Never allow cylinders to lie on their sides.</p> <p>Take immediately out of use any fuel gas cylinders in which leaks occur. Handled leaking cylinders in accordance with the following procedures:</p> <ul style="list-style-type: none"> • Close the valve, tag the cylinder, move it outdoors away from sources of flame or sparks. If desired, use a regulator attached to the valve to temporarily stop a leak through the valve seat. • If leaks occur at the fuse plug or other safety device, tag the cylinder, move it outdoors away from sources of flame or sparks, and leave the valve slightly open to permit the gas to escape slowly. • Post signs warning workers against approaching leaking or otherwise defective cylinders with lighted cigarettes or other sources of ignition, notify the supplier, and follow the instructions in the compressed gas cylinder section of the Parsons Health and Safety Manual (subsection 13.3) for returning cylinders to suppliers.

Table H-2 – Craft Specific Safety Guidelines (Contd)

Subject	Requirement
<p style="text-align: center;">Pressure-Reducing Regulators</p>	<p>Open acetylene cylinder valves slowly, but not more than 1-1/2 turns of the spindle, only with the special wrench provided by the supplier. Leave the wrench in position on the stem while the cylinder is in use so that it can be quickly turned off in case of emergency.</p> <p>Do not use the top of a cylinder as a receptacle for tools. Improper use may damage the safety devices in the head or interfere with the quick closing of the cylinder valve.</p> <p>Keep oxygen cylinders and fittings away from oil or grease which, in the presence of pressurized oxygen, may ignite violently. Employees are prohibited from handling oxygen cylinders or apparatus with oily hands or oil-saturated gloves. Before beginning work with pressurized oxygen, warn workers against permitting a jet of oxygen to strike an oily surface or greasy clothes, or into fuel oil or storage that contains a flammable substance.</p> <p>Hammers and wrenches may not be used for opening oxygen cylinder valves. If valves cannot be opened by hand, notify the supplier who will replace the cylinder.</p> <p>When a pressure-reducing regulator is attached to a cylinders open the oxygen cylinder valve slightly at first so that the indicator on the regulator pressure gauge can climb slowly, after which the valve may be completely opened. A sudden release of high pressure can damage the regulator and pressure gauges. Stand at the side of the regulator and not in front of glass-covered gauge faces when opening cylinder valves.</p> <p>When an oxygen cylinder is in use, open the valve fully to prevent leakage around the valve stem.</p> <p>Use pressure-reducing regulators only for the gas for which they are intended.</p> <p>Never use gas from any cylinder without first attaching a suitable pressure-reducing regulator to the cylinder valve.</p> <p>Before attaching a regulator, open the cylinder valve slightly to clear the valve of dust or dirt, then close it.</p> <p>On oxygen cylinders, close the pressure-reducing regulator by turning off the pressure and adjusting the screw to the left (counterclockwise) until it turns freely before opening the cylinder valve.</p>

Table H-2 – Craft Specific Safety Guidelines (Contd)

Subject	Requirement
Hoses and Hose Connections	<p>Use only hoses made especially for welding and cutting to connect an oxy-acetylene torch to gas outlets. Metal-clad or armored hose is not recommended.</p> <p>Avoid using unnecessarily long hose. When long hose must be used, exercise appropriate care to ensure that hose does not kink or tangle, and that it is protected from being run over by trucks, stepped on, or otherwise damaged.</p> <p>Frequently inspect all hoses for leaks, worn places, and loose connections. Immersing hose in water under normal working pressure is a satisfactory method of testing. When worn at a connection, cut off the worn portion and reinsert the connections. Repair leads by cutting the hose and inserting a splice. Tape repairs are prohibited.</p> <p>Place flashback valves on fuel gas system regulators to avoid flashbacks into the cylinder.</p> <p>Discard any hose section in which a flashback has occurred and caused burns. Flashbacks burn the inner walls and render hose unsafe for use.</p> <p>Do not use single hose containing more than one gas passage. A wall failure in a hose of such design would permit the flow of one gas into the other gas passage, and cause unacceptable risk to workers. When parallel lengths of oxygen and acetylene hose are taped together for convenience and to prevent tangling, not more than 4 in. out of every 8 in. should be covered with tape.</p>
Eye Protection	<p>When engaged in oxy-acetylene welding or cutting, wear goggles equipped with suitable filter lenses.</p> <p>When engaged in electric arc welding, use shields or helmets equipped with suitable filter lenses.</p> <p>All employees exposed to flying objects resulting from chipping or similar operations must wear goggles with hardened lenses and side shields. Employees doing arc welding should wear such goggles under hoods for protection when the hoods are raised.</p> <p>Where practicable, enclose welding operations.</p>

Table H-2 – Craft Specific Safety Guidelines (Contd)

Subject	Requirement
<p>Oxy-Acetylene Burning Precautions</p>	<p>Always call oxygen by its proper name, "oxygen." Oxygen should never be called "air" and should never be confused with compressed air. Also, call acetylene by its name, "acetylene" not "gas."</p> <p>Never feed oxygen from a cylinder into a confined space, as it is unsafe to do so. Oxygen will not burn, but it supports and accelerates combustion, and can cause oil, wood, clothing, and other similar materials to burn with intensity. Clothing saturated with oxygen or oxygen-rich air may need only a spark to burst into flames. Test all equipment, including hoses, for leaks before taking it into confined places and bring it out when work is interrupted for any reason, even for a short time.</p> <p>Never substitute oxygen for compressed air. Such substitution can easily result in serious accidents. Never use oxygen in pneumatic tools, in oil preheating burners, to start internal combustion engines, to blow out pipe lines, to dust clothing or work, for pressure tests of any kind, or for ventilation. Never allow oxygen or oxygen-rich air to saturate any part of clothing since a spark might quickly set the clothing aflame.</p> <p>When work is stopped for an hour or more, release the pressure in the regulator. To minimize the chance of accidental release of gases when workers are away from equipment, cylinder valves must be closed and regulators and hose lines relieved of gas pressure, just as when detaching a regulator from a cylinder.</p> <p>Do not relight flames on hot work, in a pocket, or in small confined spaces. Always relight with a friction lighter in such instances. Gases do not always ignite instantly when a flame is relit from hot metal. In a small pocket, violent ignition may occur if it is delayed for even a second.</p> <p>Never alter any component of a compressed gas cylinder, regulators, valves, or fittings.</p> <p>Never identify compressed gas cylinders by color. Compressed gas cylinders must be identified by label only. Return compressed gas cylinders without labels to suppliers.</p>

PARSONS
Supervisor, Resident Engineer, Inspector Daily Checklist

Project: _____

Date: _____

Name: _____

Time: _____

Any items that have been found deficient must be corrected before work or use.

This checklist includes, but is not limited to, the following:

	Yes	No
<i>Safe Access and Workspace</i>	_____	_____
Are safe access and adequate space for movement available for:	_____	_____
Emergencies	_____	_____
Work area	_____	_____
Walkways and passageways	_____	_____
Are ladders, stairways, and elevators properly located and functioning?	_____	_____
Is protection provided for floor and roof openings?	_____	_____
Is overhead protection provided for all areas of exposure?	_____	_____
Is lighting adequate?	_____	_____
<i>Planning Work for Safety</i>	_____	_____
Are employees provided with all required protective equipment?	_____	_____
Have other contractors and trades been coordinated with to prevent congestion and avoid hazards?	_____	_____
Is all temporary flooring, safety nets, and scaffolding provided where required?	_____	_____
<i>Utilities and Services Identification</i>	_____	_____
High voltage lines	_____	_____
Have all been identified by signs?	_____	_____
Have high voltage lines been moved or de-energized, or barriers erected to prevent employee contact?	_____	_____
<i>Sanitary Facilities</i>	_____	_____
Drinking water	_____	_____
Are toilet facilities adequate?	_____	_____
<i>Work Procedures – Materials Handling</i>	_____	_____
Is material handling space adequate?	_____	_____
Is material handling equipment adequate and proper?	_____	_____
Is material handling equipment in good condition?	_____	_____
<i>Other (e.g., tunnels, excavations, shafts)</i>	_____	_____

Comments:

PARSONS
Activity Hazards Analysis

Page ____ of ____

Project Name & Number:		AHA No.		Date:	New:
Location:		Contractor:			Revised:
Required Personal Protective Equipment				Analysis by:	Date:
		Superintendent/Competent Person		Reviewed by:	Date:
Work Operation:				Approved by:	Date:
Work Activity	Potential Hazards	Preventive or Corrective Measures		Inspection Requirements	

Training Requirements:

All assigned employees are required to familiarize themselves with the contents of this AHA before starting a work activity and review it with their Supervisor during their Daily Safety Huddle.

PARSONS

Safety Meeting Agenda/Minutes

Date & Location:
Meeting Start Time:
Meeting End Time:

Agenda:

Review of minutes of last safety meeting: Approved? Yes No

Corrections:

Unfinished business from last meeting:

Any hazards or safety concerns reported during this time period? Status of any corrective action reports?

Any accident investigations conducted since the last meeting? Describe identification of the cause and corrective action(s)?

Is your accident and illness prevention program working? Yes No

If no, describe any recommendations to improve it.

What other safety-related topics were covered in this meeting?

Safety related concerns for the next period?

Who attended this meeting?

Minutes prepared by:

Next meeting date and location: