

**ONE SRP SAFETY**

*We work safely for our families,  
our health, and each other.*

# **CONTRACTOR SAFETY MANAGEMENT PROGRAM HANDBOOK**



Delivering water and power®



## **SAFETY COMMITMENTS**

For each job, safety is the top priority over all other considerations.

We work safely by consistently following safety programs, policies, procedures and rules.

We address potentially unsafe actions.

We ask safety questions, educate, share safety information, and give and receive safety feedback respectfully.

We recognize and reward safe behavior, safety leadership and innovation that improves safety performance.

*Each of us, by living these commitments and taking care of each other, will achieve our vision of zero injuries.*

For additional information or an electronic copy of this handbook, please visit **[srp.net/contractorsafety](http://srp.net/contractorsafety)**.

*Printed or distributed copies are considered uncontrolled. Each user is responsible for accessing and using the current version.*

# **SAFETY MANAGEMENT STATEMENT**

At SRP, safety is a fundamental core value. SRP and its employees are committed to conducting all business and operations with the highest regard for the safety of employees, contractors, customers and the public.

## **Safety Goals**

- Conduct business in a responsible manner that promotes the safety, health and well-being of our employees, contractors and the public.
- Provide a safe and healthy work environment free from recognized hazards.
- Strive to prevent all work-related injuries, occupational illnesses and property damage.
- Regularly evaluate our safety performance to ensure that we continually meet or exceed all safety, health and environmental regulations.
- Investigate and report both incidents and near misses, incorporate lessons learned, and communicate findings to affected persons.

## **Key Principles of Safety Management**

- Safety is the responsibility of everyone. SRP is committed to a safe and healthy work environment.
- SRP Leadership is committed to visible involvement in the safety of everyone.
- SRP ensures that workers are encouraged to report hazards, symptoms, injuries and illnesses.
- Supervisors are responsible for providing safety training, equipment and materials and for ensuring compliance with all safety procedures, rules and regulations.
- All employees are responsible and accountable for working safely and actively caring for each other's safety.

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## 1.1 Welcome

Welcome to SRP's team! You are joining a team of dedicated workers who come from many different places and have varied backgrounds. No matter who you are or what your job is, we are all bound by one common goal: that we all go home uninjured every day.

We are committed to reducing the number and severity of incidents. At Salt River Project (SRP), safety takes priority over production, schedule and cost.

*Remember: Safety is not a priority with a changing value but rather a value associated with every priority.*

Keep your head in the game! You have the authority to stop work when an unsafe condition exists. Immediately notify your designated safety representative if you observe unsafe actions or if requested to perform unsafe acts.

### 1.2 SRP's Commitment to Safety

The Occupational Safety and Health Act (OSHA) establishes the minimum standard for safety in the work environment. Federal, state and local laws govern work activities, as well as industry codes and specific contract terms and conditions. Regulatory compliance is always an expectation. Everyone working on any SRP property shall become familiar with and adhere to these safe work practices.

**Note:** For information on SRP's One SRP Safety program, contact your SRP Construction Coordinator (CC).

## Part 1: Introduction and Program Overview

### 1.3 Definitions and Key Terms

The following terms are used throughout this handbook:

**Contractor:** General Contractors, self-employed Contractors and Subcontractors working on construction, maintenance/repair, major renovations, turnarounds or specialty services in or around SRP facilities.

**Subcontractor:** Any Contractor engaged by a General Contractor to perform work under the General Contractor's contract with SRP. Subcontractors are subject to the same safety requirements as the General Contractor.

**Construction Coordinator (CC):** The individual designated by SRP Management to be the primary point of contact at the worksite for the Contractor during execution of the work. Also referred to as a "Consultant."

**Contractor Designated Safety Representative (CDSR):** An individual assigned by the Contractor who is responsible for communicating with the CC regarding safety matters and for reviewing the Contractor's operations from a safety perspective throughout the contract.

**Safety Representative (SR):** A safety professional designated by SRP to communicate with the Contractor's project management team.

**Competent Person:** One who is capable of identifying existing and predictable hazards in the surroundings or working conditions that are unsanitary, hazardous or dangerous to employees and who has authorization to take prompt corrective measures to eliminate them (per OSHA definition).

**ISNetworld (ISN):** Third-party platform SRP uses to pre-qualify and manage Contractor safety compliance. Contractor employees can view communications, training records and other items in the ISN Empower app.

**Experience Modification Rate (EMR):** An insurance premium adjuster rate that indicates a Contractor's past safety performance. A lower EMR indicates fewer or less severe incidents than expected.

**SRP Facilities:** Any SRP-owned, leased or maintained property sites, buildings, electrical system structures, power lines, transmission or distribution systems, water delivery systems, and structures, easements and rights-of-way.

**Tailboard Meeting:** Pre-job meeting to discuss work issues affecting safety, including hazard identification, controls and emergency procedures.

**Generation Engineering:** The SRP organization, in conjunction with the CC, responsible for the facility/site where contracted work is taking place.

**Salt River Project (SRP):** Established in 1903, SRP is a water and power supplier in Arizona.

#### **1.4 Contractor Responsibilities Overview**

Contractors shall take every reasonable measure to ensure the safety of the public, SRP personnel and all Contractor personnel. Key responsibilities include:

- Complying with all federal, state and local safety regulations, as well as SRP-specific requirements.
- Providing a safe worksite and enforcing all applicable safety requirements.
- Designating a Contractor Designated Safety Representative (CDSR) to communicate with SRP's Construction Coordinator (CC) on safety matters.
- Ensuring all employees receive appropriate safety training and orientation.
- Reporting all incidents, including unsafe acts or conditions, to SRP.
- Maintaining required documentation and making it available for review.
- Ensuring that Subcontractors comply with the same safety requirements.

**Note:** Nothing contained in this document creates or implies that an employer/employee relationship exists between Contractor employees or service personnel and SRP.

## **SECTION 2—PRE-WORK REQUIREMENTS**

### **PART 2: PRE-WORK REQUIREMENTS**

#### **2.1 Pre-Qualification and ISN**

SRP uses ISNetworkworld (ISN) to pre-qualify and manage Contractor safety. Contractors shall:

- Maintain an active ISN account with current safety documentation.
- Ensure their ISN profile includes up-to-date incident/injury data, safety programs and training records.
- Address any compliance issues identified through ISN promptly.

SRP evaluates Contractor safety performance using metrics, including Experience Modification Rate (EMR), Total Recordable Incident Rate (TRIR), and Days Away, Restricted, or Transferred (DART) rate. Contractors with a strong safety performance record are more likely to be considered for future work.

#### **2.2 Fitness for Work**

Contractors shall ensure that all personnel are fit to perform their duties safely. SRP may require Contractors to have a drug testing program as part of their safety compliance program.

If SRP determines that a specific employee of a Contractor is in a condition or acting in a way that presents risk of harm to themselves or others, SRP reserves the right to require that employee to not return to the site until deemed fit for duty.

The following items are strictly prohibited on any Contractor or Subcontractor vehicle, equipment, property, jobsite, work area or work location:

- Illegal and unauthorized drugs and substances, look-alikes and synthetic drugs
- Alcoholic beverages
- Drug paraphernalia
- Legally prescribed medications in excess of reasonable dosage requirements

- Contraband or stolen property
- Firearms, weapons, ammunition or explosives (unless specifically authorized for the work)
- Any other hazardous substances or articles

Persons found to be using, in possession of or concealing any of these items shall not be allowed on the project premises and could face being permanently banned from SRP facilities.

### **2.3 Orientation and Training**

The Contractor, in cooperation with the Construction Coordinator (CC), shall:

- Conduct a safety orientation for all Contractor employees, including Subcontractors.
- Conduct the orientation in conjunction with SRP's Contractor safety orientation.
- Develop and include site-specific emergency and evacuation plans in the orientation.
- Ensure personnel have appropriate certifications for specialized equipment operation and/or trade, with proper documentation available prior to performing work.

Training requirements that shall be verified and documented include (as applicable to the work scope):

- OSHA 10-Hour or 30-Hour Construction Safety
- Hazard Communication / Global Harmonization System (GHS)
- Confined Space / Permit-Required Confined Space Entry
- Hazardous Energy Control / Lockout, Tagout (LOTO)
- Respiratory Protection
- Excavation Safety / Competent Person
- Fall Protection
- Crane Operator Certification (OSHA 29 CFR 1926.1427)
- Rigger Qualification (OSHA 29 CFR 1926.753)

## **SECTION 2 —PRE-WORK REQUIREMENTS**

### **2.4 Site-Specific Safety Planning**

SRP recognizes the importance of pre-job planning in preventing unsafe acts and conditions. The Contractor, in cooperation with the CC, shall:

- Develop, review and approve site-specific safety procedures and processes prior to any fieldwork.
- Identify known hazards and required controls for the specific work scope.
- Establish communication protocols and emergency contacts.
- Verify location of underground utilities and installations in the work area.
- Identify overhead energized electrical power lines and establish safe working distances.

For multi-contractor worksites, the General Contractor shall have a representative on site overseeing Subcontractors and shall be available to discuss the project, safety requirements and incidents with SRP's CC and/or Safety Representative.

### **2.5 Documentation Requirements**

Prior to commencing work, Contractors shall provide the following documentation to the CC (as applicable):

- Written safety program and site-specific safety plan
- Hazard Communication (HAZCOM) Program, including Safety Data Sheets (SDS) for all hazardous materials
- Training certificates and qualification records
- Insurance certificates and workers' compensation documentation
- Equipment inspection and certification records
- Confined space entry procedures (if applicable)
- Clearance / Lockout, Tagout (LOTO) procedures

SRP stores documentation from Contractors in different systems, including but not limited to:

- ISNetworld (safety programs, data and training records)
- Aravo (insurance certificates)

- Cority (Safety Data Sheets)
- Other systems as necessary

Please contact your CC for further information. Contractors shall ensure that all documentation is maintained in the appropriate system.

## **PART 3: GENERAL SAFETY REQUIREMENTS**

The following requirements apply to all work performed for SRP, regardless of work type or location.

### **3.1 Stop-Work Authority**

*All employees at the project site have the authority and responsibility to stop a job if they see an unsafe act or condition that is serious or life-threatening.*

Regardless of any “time is of the essence” clause or schedule pressure, stop-work authority for unsafe conditions is never overruled. Additionally, SRP has the authority to have individuals removed from project sites and stop jobs if hazards are present until hazards are corrected.

When work is stopped, the Competent Person or lead/foreman shall communicate the event to the Contractor Designated Safety Representative (CDSR) before the end of the shift. The CDSR shall notify the Construction Coordinator (CC).

### **3.2 Interaction with SRP**

The CC is the primary point of contact for Contractors during execution of work. The CC will provide site-specific information about known hazards and facility requirements.

The Contractor shall:

- Provide an on-site representative throughout the work execution.
- Assign a CDSR to communicate with the CC regarding safety matters.

## SECTION 3 — GENERAL SAFETY REQUIREMENTS

- Report any incidents, including unsafe acts or conditions, to the CC.
- Inform the CC immediately if an OSHA compliance officer or consultant comes to the worksite. The CC may request a delay in initiating the inspection until the CC arrives.
- Cooperate fully with SRP investigations of Contractor incidents.

### 3.3 Tailboard Meetings and Job Briefings

Some sites/locations may require tailboard meetings/pre-job briefings. Tailboards are recommended for all sites/locations for work at SRP. When required, the Contractor shall:

- Conduct regularly scheduled foremen’s meetings and daily (or more frequent) tailboard meetings to discuss safety issues, including near misses, incidents and unsafe conditions.
- Document tailboard meetings. Documentation should include date, attendees, topics discussed, and any identified hazards and controls.
- Submit safety meeting documentation to the CC or Safety Representative (SR) if requested.

Pre-job meetings shall address the elements of the specific task planned. The group leader shall ensure that the discussion remains focused on planning a safe job. Each worker is responsible for ensuring a job is safe to perform. If uncertain, the worker should not attempt the job until supervision reviews it and provides additional guidance.

### 3.4 Personal Protective Equipment (PPE)

Contractors shall provide and ensure the use of appropriate PPE for all work activities. Minimum requirements include the following:

#### General Requirements

- All construction sites are “Hard Hat Areas.” All employees and visitors shall wear approved hard hats during work hours while inside construction areas.
- Leather hard-toed work boots meeting ASTM F2413-05 C75 are required

at all times at worksites. Tennis shoes, sneakers, soft leather shoes, sandals, flip-flops or other open-toed shoes are not acceptable.

- Full-length trousers and shirts that cover the shoulders (minimum 4-inch sleeves) are required. Tank tops, shirts cut off at the midriff, shorts and cutoffs are not permitted.

### Eye and Face Protection

Safety glasses with side shields (meeting ANSI Z87.1) are required when there is danger of flying particles, hazardous substances or injurious light rays.

Activities requiring eye protection include but are not limited to:

- Chipping, grinding or cutting operations
- Working with compressed air or other gases
- Sand or water blasting
- Working on energized switchboards
- Using explosive-actuated fastening or nailing tools
- Welding and cutting operations (with appropriate shade lens)

### Fall Protection

**Fall protection is required for all work at heights of 4 feet or more above a lower level.** Safety harnesses and secured safety lanyards are required for all Contractor employees working from unguarded surfaces when falls present a hazard. Exception: During scaffold erection and dismantlement, fall protection is required at heights of 10 feet or more per OSHA 1926.451.

- Lanyards shall be tied off to an appropriate anchor point rated for fall arrest.
- Employees working from swing scaffolds, boatswain chairs or other suspended work platforms shall wear a harness with their safety line secured to a separate lifeline.

### Respiratory Protection

Approved respirators are required when excessive dust, mist, gases or other atmospheric impurities are determined to be harmful to health. The use of

## SECTION 3 — GENERAL SAFETY REQUIREMENTS

respiratory protection requires a respiratory protection program that includes medical surveillance, training and fit testing per regulatory requirements.

### 3.5 Housekeeping

**Applicability:** These requirements apply to all SRP worksites, including generation facilities, substations, transmission and distribution sites, facilities and rights-of-way.

Work areas shall receive daily cleanup. Debris shall be legally disposed of at least once a week or as required. The Contractor is responsible for hauling debris away when necessary.

1. Oily rags or other combustible debris shall be disposed of in covered metal containers provided for the purpose.
2. Eating trailers, change trailers, parking lots and toilet facilities shall be maintained in a clean and sanitary condition.
3. Trash, refuse, debris, lunch papers and other waste shall be placed in properly designated refuse containers.
4. Protruding nails, screws or other metal in form lumber, boards or other material shall be removed, bent over or guarded to prevent puncture injuries.
5. Worksite walking and working areas shall be kept free of potential slip, trip, fall or other accident hazards, including hoses, extension cords, welding leads and other potential hazards.
  - Clean up or eliminate hazards such as grease, oil, water, ice, snow or other liquids on walkways, ladders, stairways, scaffolds or other accessways or working areas.
  - Dispose of all waste materials and soil resulting from the work performed each day or as required by the CC.

### 3.6 Incident Reporting and Investigation

The Contractor is responsible for determining and taking appropriate emergency medical and safety actions. The Contractor is responsible for notification of law enforcement agencies and family members of Contractor employees. All Contractors are responsible for their own medical treatment and transport to a medical facility.

**All Contractor incidents, regardless of severity, are reportable.** This includes incidents sustained by Subcontractors and/or third parties.

### Reporting Requirements

1. The CDSR shall notify the CC and SR of all accidents/incidents involving personal injury/illness and vehicular, equipment or property damage.
2. The CDSR shall notify the CC within 48 hours and complete an incident investigation for all work-related accidents/incidents, including:
  - Injury/illness requiring medical treatment to any Contractor employee or member of the public
  - Damage to a vehicle, equipment, property or the environment
  - Near misses: observable incidents that could have but did not result in injury or damage
3. The CDSR shall complete and submit a copy of the Accident/Incident Investigation Report within five working days following the incident to the CC.
4. Contractors subscribed to ISN shall use the Incident Management Tool within their ISNworld account.

### Near Miss Reporting

SRP encourages proactive reporting of near misses. Near miss reporting helps identify hazards before they result in injury or damage. Contractors shall:

- Establish a process for employees to report near misses without fear of reprisal.
- Investigate near misses to identify root causes and corrective actions.
- Share lessons learned with employees and SRP.

### Investigation Procedures

Contractor-involved equipment and/or worksites may be required to remain secure until the Contractor has completed an investigation. On major incidents (major equipment failures, contact with high-voltage power lines, spills, personal contacts with toxic or hazardous materials, slides, cave-ins, etc.), the

## **SECTION 4 — HAZARD-SPECIFIC REQUIREMENTS**

CC, their manager, the site manager (if applicable) and SRP Safety Services may be included in the investigation.

The Contractor is responsible for completing all relevant government-required forms and reports and ensuring their submission to the appropriate agencies.

To report an incident and complete the Contractor Incident Investigation Form, please contact your CC or SRP representative.

## **PART 4: HAZARD-SPECIFIC REQUIREMENTS**

The following requirements apply to specific types of hazardous work. Where any portion of these notes conflicts with or is less stringent than any applicable federal, state or local statutory safety regulation, the statutory regulation shall take precedence.

### **4.1 Electrical Safety**

#### **General Electrical Requirements**

1. All temporary and permanent electrical work, installation and wiring shall conform to all applicable federal, state and local electrical codes, including the National Electrical Code.
2. Only qualified electricians are authorized to perform electrical work.
3. No Contractor employee shall work close to an unprotected electrical power circuit so that he/she may contact the same in the course of the work unless the employee protects against electrical shock by de-energizing the circuit and grounding or guarding it by effective insulation or other means.
4. Electrical equipment or machinery shall be de-energized and/or rendered inoperative by the electrician locking out supply switching prior to performing work. The only exception is when power is necessary for adjustments or electrical troubleshooting.
5. Extension cords used with portable electrical tools and appliances shall be of the three-wire type rated "Heavy Duty." Remove all cords with the ground probe removed or rendered ineffective from service.
6. Electrical cords and trailing cables shall be covered, elevated or

otherwise protected from damage and shall not be laid in walkways, aisles or doorways.

7. Ground fault circuit interrupters (GFCI), as the primary means of protection, shall properly protect all temporary electrical tools and cords.
8. Contractors shall use GFCI as specified in OSHA 29 CFR 1926.404(b)(1)(ii) or an assured equipment grounding conductor program as outlined in OSHA 29 CFR 1926.404(b)(iii) to ensure all tools and cords remain in a safe condition. Documentation of inspections shall be maintained and available to the Construction Coordinator (CC) for review upon request.
9. Extension cords shall be maintained and in good condition.
10. Transmission, distribution or generation electrical work shall follow all applicable procedures, including hold tag (reclosure disablement), clearance, personal protective grounding, and approved hot line work procedures.

### **Equipment Clearance / Lockout, Tagout (LOTO)**

**Note:** The term “clearance” in this section refers to equipment energy isolation procedures (LOTO), not T&D electrical line clearances.

1. When applicable, Contractors shall comply with SRP’s clearance / LOTO procedures. When working at a generation plant, plant-specific training will be required and provided when necessary.
2. Contractor shall develop a clearance / LOTO procedure that meets all OSHA and SRP requirements.
3. Adherence to clearance / LOTO procedures is required to ensure operational safety.
4. Contractor shall notify the CC prior to starting any major operation involving clearance / LOTO procedures. A pre-task meeting involving the Contractor’s on-site supervisor and/or Contractor Designated Safety Representative, and the responsible project management representative, shall take place. Specific procedures shall be available and reviewed by all involved prior to commencement of work.

### **Electrical Equipment Areas (600 volts and above)**

## SECTION 4 — HAZARD-SPECIFIC REQUIREMENTS

This section applies to Contractor personnel performing work on or near electrical equipment rated 600 volts and above.

1. In addition to this procedure, the Contractor is expected to adhere to all federal, state, local and, when applicable, operating plant safety-related procedures. Communicate conflicts between procedures to the CC, who will provide resolution in writing prior to starting work.
2. Prior to starting work, the Contractor shall ensure the installation of protective covers on all electrical equipment located in the Contractor's designated work area. Only qualified electricians shall install covers and perform any other work on electrical equipment.
3. Whenever possible, the Contractor shall lock out equipment in an approved manner before performing work. The Contractor shall submit a permit to the CC prior to de-energizing or locking out existing equipment.
4. If it is not possible to de-energize and lock out equipment before working on it, the Contractor shall:
  - Segregate or rope off the area surrounding the equipment, permitting access by qualified electricians only. Provide a minimum of 6 feet of clearance.
  - Mount highly visible warning signs stating "Danger! High Voltage. Authorized Personnel Only" or equivalent.
  - Reinstall all protective covers if leaving equipment unattended.
  - Adhere to all applicable safety guidelines when working on energized equipment, including proper safety equipment (safety goggles, gloves, insulation blankets, etc.) and properly trained personnel.

### Working Near Overhead Power Lines

Contractor shall be aware when working under SRP overhead power lines, consider them energized, and work in accordance with SRP rules, codes and state laws. The Contractor is responsible for maintaining proper working distances from overhead energized electrical power lines for materials, equipment and personnel.

#### 4.2 Fall Protection

##### Wall and Floor Openings

1. Floor openings shall be guarded in accordance with OSHA standard guardrails and toe boards or covers secured against accidental displacement. Covers shall be designed for the maximum intended weight of load with adequate markings.
2. Manhole openings shall be guarded with covers. When the cover is not in place, a temporary barrier shall protect the opening.
3. 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 have standard guardrails per OSHA regulations.
4. Runways, or the equivalent, shall have standard railing guards on all open sides 4 feet or more above floor or ground level, with toe board provision on each exposed side.
5. Regardless of height, open-side floors, walkways, platforms or runways above or adjacent to dangerous equipment and similar hazards shall have standard railing and toe board.

### **Scaffolds**

1. Lean-to scaffolds and makeshift platforms are not permitted.
2. No scaffold erection, movement, dismantlement or alteration shall take place except under the supervision of a Competent Person (see OSHA 1926.450). Scaffolds shall identify the Contractor responsible for erection by tag or other visible method.
3. Scaffolds may only store materials currently in use.
4. All scaffolds shall carry, without failure, four times the maximum intended load.
5. All scaffolds shall be inspected prior to use and at the beginning of each shift. Scaffolds shall receive regular maintenance. Damaged or weakened scaffolds shall be immediately repaired in accordance with OSHA 29 CFR 1926 Subpart L. A Competent Person shall perform all scaffold inspections.
6. Scaffolding on staging more than 4 feet above the ground or floor shall have standard guardrails and toe boards properly attached. **Note:** During scaffold erection and dismantlement, fall protection is required at 10 feet per OSHA 1926.451.

## SECTION 4 — HAZARD-SPECIFIC REQUIREMENTS

7. Guardrails shall be 2 inches by 4 inches or equivalent and approximately 42 inches high with a mid-rail. Supports shall be at intervals not exceeding 8 feet. Toe boards shall be a minimum of 4 inches in height. Planking shall be cleated or otherwise secured to prevent displacement.

### Ladders

1. All persons shall face the ladder and hold the side rails with both hands when ascending/descending. Material shall be lifted/lowered by hoisting equipment or a line, not held in one hand while on a ladder.
2. Painting wooden ladders is not permitted because it may cover defects and deterioration.
- 3 Side rails, cleats and rungs shall be kept clean and free of lines, hoses, cables, wires, oil, grease and debris.
4. If a ladder is the only means of access or exit from a work area for 25 or more employees, or simultaneous two-way traffic is expected, a double cleat ladder shall be installed.
5. Ladders with broken or missing rungs/steps, broken or split side rails, or other defects shall not be used.
6. Portable ladders shall be placed so the horizontal distance at the bottom is not less than one-quarter of the vertical distance to the top support.
7. Portable ladders shall have secure footing and a rigid top rest. The top and bottom shall be secured to prevent movement.
8. Single portable ladders over 30 feet in length shall not be used. If additional heights are necessary, use separate ladders with intermediate landing platforms.
9. Portable ladders used on smooth surfaces shall be equipped with non-slipping bases or otherwise secured.
10. Ladders shall project not less than 3 feet above the top landing. When not practical, grab rails that provide a secure grip shall be installed.
11. Aluminum and/or other metallic ladders are not permitted for use. Only use non-conductive ladders such as fiberglass. (This is an enterprise-wide requirement for electrical safety.)
12. Persons shall not work off the top two steps of a stepladder. Stepladders shall be fully open and locked. Stepladders shall not be used as straight ladders.

13. Portable ladders shall be constructed, maintained, inspected and used in accordance with OSHA 29 CFR 1926.1053.

### **4.3 Excavation and Trenching**

Contractor shall furnish a Competent Person at all excavation worksites. The Competent Person shall be capable of identifying existing and predictable hazards in the work area that may be unsanitary or hazardous. The Competent Person shall be authorized to take prompt corrective measures and sign excavation permits in accordance with OSHA standards.

The Contractor is responsible for locating underground utilities and installations in the work area and shall take necessary measures to safeguard the integrity of these systems during work. Contact Arizona 811 before any excavation.

Refer to OSHA 29 CFR 1926 Subpart P for complete excavation safety requirements.

### **4.4 Confined Space Entry**

**The Contractor is responsible for the oversight of the technical aspects of this procedure.**

Contractor shall establish and maintain an effective confined space entry procedure that complies with OSHA standards. Key requirements include the following:

1. Identify tasks that may involve worker entry into a confined space and ensure that proper authorizations are obtained.
2. Obtain necessary permits prior to entry.
3. Test atmospheric conditions before entry and continuously monitor during work.
4. Establish rescue procedures and ensure rescue equipment is available.
5. Train all personnel involved in confined space entry on hazards and procedures.

## SECTION 4 — HAZARD-SPECIFIC REQUIREMENTS

### 4.5 Cranes, Rigging and Material Handling

#### Mobile Cranes

**Crane Setup:** The Contractor's crane operator shall be responsible for:

- Proper placement of the crane in relationship to the load and landing area to obtain the best lift capacity.
- Leveling the crane to within one degree of level and rechecking the level a minimum of three times during the work shift.
- Proper placement and use of outriggers for all lifts except where the manufacturer permits otherwise.
- Determination of stable or unstable ground or footing. Additional floats, cribbing, timbers or other structural members shall be of proper design and sufficient for uniform distribution of the load.
- Installation and maintenance of crane swing radius protection.

#### Load Ratings:

- The weight of all auxiliary handling devices (hoist blocks, headache balls, hooks, rigging) is part of the total load.
- The crane operator shall have a copy of the bill of lading or other appropriate documents with item weight clearly legible.
- All hoisting equipment shall complete a performance test before being placed in service and at least every 12 months.

**Crane Inspection:** Cranes shall be inspected:

- After setup and prior to initial lift
- Before each shift
- After every malfunction
- Periodically and annually per manufacturer recommendations

Keep records pertaining to crane inspections and performance tests on site with the crane and a copy in the Contractor's site field office.

**Operator Qualifications:** Cranes shall only be operated by:

- OSHA 29 CFR 1926.1427 certified operators
- Trainees under direct supervision of a certified operator
- Test and maintenance personnel when necessary

A signal person shall be designated before each lift and be in clear communication with the operator using agreed-upon hand signals or other communication method established and tested prior to the lift. Per OSHA 1926.1419(c)(3)(ii), non-standard hand signals may be used if the signal person, operator and lift director agree beforehand.

**Critical Lifts:** At operational plant sites, the Contractor shall submit a lifting plan for review to the CC prior to performing an unusual or critical lift. The plan shall address crane placement, lift height and radius, load weight, obstacles and any clearance problems.

### **Rigging Requirements**

1. Riggers shall be identified and qualified in accordance with OSHA Standard 29 CFR 1926.753(c)(2).
2. All rigging equipment shall be inspected prior to each shift and as necessary during the shift. Immediately remove damaged or defective slings from service and tag as "Do Not Use."
3. All rigging devices, including slings, shall have permanently affixed identification stating size, grade, rated capacity and manufacturer.
4. Remove any rigging not in use from the immediate work area.
5. Hang rigging, including slings, on a rigging frame to avoid bends and kinks.
6. Wire rope slings shall be lubricated as necessary and every four months or more, even during storage.
7. "Shop-made" grabs, hooks, clamps or other lifting devices are not permitted unless proof-tested to 125% of their rated load by an approved testing agency.
8. All rigging equipment in use shall have a safety factor of five.
9. Slings that have experienced a shock load shall be removed from service.

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10. A record of inspections shall be maintained and available for review by the CC or Safety Representative.

### **Material Handling and Storage**

1. Materials shall be properly stored and orderly piled. Aisles, loading/unloading areas and fire lanes shall remain clear.
2. Heavy machinery, equipment or parts suspended or held aloft by slings, hoists or jacks shall be substantially blocked or cribbed to prevent falling or shifting before employees work under or between them.
3. Bulldozer and scraper blades, end-loader buckets, dump bodies and similar equipment shall be fully lowered or blocked during repair or when not in use.

### **4.6 Hot Work and Fire Prevention**

#### **Arc/Gas Welding and Cutting**

No welding or cutting shall take place unless the CC has provided a hot work permit. Hot work permits are required for every welding and/or cutting operation. Every separate cutting and welding operation shall have, within easy reach, a proper fire extinguisher of a size and type to extinguish any fire that may ignite from materials cut or welded, or materials immediately adjacent to the operation. A fire watch is required as necessary.

#### **Fire Prevention and Protection**

1. All employees shall take positive measures to prevent fires within their work areas.
2. Contractor shall immediately notify the CC of any fire and conduct an investigation. If property damage results, submit a written report including extent and estimated cost.
3. Contractor shall maintain a fire prevention and control plan appropriate for the work area. The Contractor shall provide proper fire extinguishers, conduct inspections and train employees on their use. Documentation of monthly and annual inspections is required.
4. Contractors shall allow access to their worksite(s) for fire prevention/

suppression. Access shall be maintained at all times for heavy firefighting equipment.

5. Open fires are not permitted. If heaters are required for work, they shall bear the UL label and be approved by the CC. A tip-over shut-off device is required with any portable space heating equipment.
6. Torch-cutting and welding operations shall be performed in accordance with applicable fire and safety regulations. Tarpaulins used in connection with these operations shall be fire-resistant.
7. Combustible materials shall be stored in accordance with OSHA 1926.152. Do not keep more than one day's supply stockpiled in one location within any given building.
8. All combustible waste materials, rubbish and debris shall be removed daily.
9. Storage of oxygen, acetylene and other welding gases in pressurized cylinders is not permitted within buildings. Secure pressurized gas cylinders in use on approved safety carts. Reserve and empty cylinders shall be stored at least 25 feet from buildings with safety caps on and secured to prevent falling.

### **No Smoking / No Open Flame Areas**

The following areas are permanently designated as "No Smoking" or "No Open Flame" areas:

- Cooling towers
- Cleaning solvent wash stations
- Warehouse solvent and oil storage
- All elevators and belt conveyors
- All fuel stations
- All computer rooms and relay rooms
- Hydrogen storage and seal oil areas
- Chlorine buildings
- Chemical warehouses
- Acid storage tanks
- Turbine oil and lube oil areas
- All switchgear rooms
- Battery rooms

## SECTION 4 — HAZARD-SPECIFIC REQUIREMENTS

- Hot work permit areas
- Fuel oil storage and unloading
- All other areas posted

### Temporary Fuel Storage Tanks

Requirements for temporary portable atmospheric pressure fuel tanks (gasoline, diesel, fuel oil):

- Prominently display “No Smoking” signs in the area.
- Provide a 20BC fire extinguisher (minimum) within 50 feet but not closer than 20 feet of the storage tank.
- Tanks shall be UL listed and meet requirements of chapters 21 and 22 of NFPA 30 (2024 edition).
- Tank size: minimum 61 gallons, maximum 600 gallons.
- Tanks shall be grounded with a permanently bonded metal grounding strap.
- Tanks shall be located at a minimum distance of 50 feet from any facility, major equipment or other hazardous materials.
- Diking capacity shall not be less than the capacity of the largest tank.
- Fuel/flammable material tanks shall not be located under power lines.

### 4.7 Motor Vehicles and Heavy Equipment

1. Only authorized, licensed drivers shall operate Contractor vehicles. Vehicle accident reports are required immediately.
2. Motor vehicle equipment with an obstructed rear view shall have a backup alarm audible above the surrounding noise level or shall only be backed up when an observer signals that it is safe to do so.
3. No person shall get on or off of moving vehicles or equipment or be underneath suspended loads.
4. At the beginning of each shift, vehicles shall be safety-reviewed to ensure equipment and accessories are in safe operating condition.
5. Vehicle operators shall not exceed posted speed limits. Unless otherwise posted, the speed limit within substations is 10 mph.
6. All vehicles shall be equipped with seat belts when required. Seat belts are required at all times while operating on the site.

7. Unattended vehicles or heavy equipment shall have engines off with brakes set.
8. When loading or unloading vehicles or equipment, the engine should be turned off, brakes set and, for larger trucks, wheels chocked. Exception: This does not apply to dump trucks being loaded from excavation operations where an operator is at the controls.
9. Cranes and other heavy equipment shall have escorts in front when being moved on congested worksites.
10. Gasoline- or diesel-powered equipment shall not be operated inside buildings or enclosed spaces unless exhaust gases can be ventilated outside. The CC shall approve all use of such equipment inside buildings.
11. Rollover protection as specified in OSHA 1926 Subpart W is required for material handling equipment.

#### **4.8 Tools and Equipment**

##### **Small Tools**

1. Power tools with necessary safety equipment (shields, tool rests, hoods, guards) are required. Broken tools or tools missing required safety controls shall not be used.
2. Contractors shall supply and require the use of PPE for employees using tools under conditions that expose them to flying objects or harmful dust.
3. All electrically powered tools shall be rated for "Industrial Use" and properly grounded or double/fully insulated.
4. All pneumatic tools shall have an attached safety clip or retainer to prevent accidental disconnection.
5. Powder-actuated fastening tools shall only be used by qualified operators. Each tool shall be tested before use and all safety devices checked. Tools shall be stored in locked containers when not in use.

##### **Concrete and Concrete Forms**

1. No Contractor employee shall be permitted to work above vertically protruding reinforcing steel unless it has been guarded to eliminate impalement hazard.

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2. Riding of concrete buckets is not permitted. Working crews shall stay away from and not walk under suspended concrete buckets.

### **4.9 Steel Erection**

All steel erection work shall meet the applicable requirements in OSHA 1926 Subpart R.

1. Permanent floors shall be installed as soon as practical following erection of structural members. At no time shall there be more than four floors or 48 feet of unfinished bolting or welding above the foundation or uppermost secured floor.
2. Solidly planked erection flooring for temporary floors shall cover the entire surface except for access openings. Planking shall be not less than 2 inches thick and laid tight and secured.
3. On structures not adaptable to temporary floors, safety nets shall be installed when the potential fall distance exceeds two stories or 25 feet.
4. Standard guardrails shall be installed around the periphery of all temporary planked floors during structural steel erection.
5. 100% fall protection is required in areas of steel erection. Installation of red barricade tape and information tags around the lift zone is required.

## **PART 5: ENVIRONMENTAL AND FACILITY-SPECIFIC REQUIREMENTS**

### **5.1 Environmental Responsibilities**

Contractors shall comply with all applicable federal, state and local environmental laws, orders and regulations.

#### **Site Protection**

1. The Contractor shall exercise care to preserve the natural landscape and prevent unnecessary destruction, scarring or defacing of the natural surroundings in the vicinity of the site and access road.
2. Construction activities shall be conducted by methods that prevent entrance

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or accidental spillage of solid matter contaminants, debris or other pollutants into streams, flowing or dry watercourses, lakes and underground water sources.

3. Excavated material or other construction materials shall not be stockpiled near stream banks, lake shorelines or watercourse perimeters.
4. The Contractor shall arrange for relocating any protected wildlife species that may inhabit the site prior to the start of construction. If protected wildlife is observed after construction starts, immediately notify the Construction Coordinator (CC).

### Dust Control

1. Contractor shall observe all requirements for dust control when any earth-moving activities disturb 1/10 acre (4,356 sq. ft.) or more.
2. Contractor shall obtain dust control certification as necessary to meet federal, state and local requirements.
3. The Contractor shall have a copy of the earth-moving or block permit and dust control plan on the site at all times.
4. Dust control is necessary as work proceeds and when disturbance of the site occurs. At the end of every workday, loose soil and silt stabilization is required using water or approved dust stabilizers. Daily dust control records are required.
5. The Contractor shall restrict tracking soil out of the site and onto adjacent pavement by use of gravel pads installed at site entrances or by other approved methods.
6. Oil and other petroleum derivatives shall not be used for dust control.

### Spill Prevention

1. Contractor shall use effective spill prevention processes and maintain spill cleanup kits at each worksite.
2. If the contractor stores more than 1,320 gallons of petroleum products on site, the contractor shall prepare and submit to SRP a Spill Prevention, Countermeasure, and Control (SPCC) Plan in accordance with 40 CFR 112.

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### **Stormwater Management**

If the project will disturb more than 1 acre of land, the contractor shall prepare a Construction General Permit (CGP) Stormwater Pollution Prevention Plan in accordance with the Clean Water Act for review and approval by SRP. After approval, submit a Notice of Intent to the Arizona Department of Environmental Quality for coverage under the CGP.

### **Waste Management**

SRP is responsible for all waste generated on SRP property. If regulated waste generation takes place on SRP property, SRP is responsible for supplying containers, accumulation, waste characterization, coordinating transportation and arranging disposal. Regulated waste materials include:

- Hazardous waste
- Polychlorinated biphenyl (PCB)
- Asbestos
- Universal waste (batteries, aerosols, pesticides, mercury-containing equipment, lamps/lighting ballasts)
- Used oil
- Other federal, state and local regulated waste materials

Non-regulated or non-hazardous wastes shall be disposed of by the generating Contractor using an SRP-approved landfill verified through the CC. SRP Investment Recovery Services may require review of project site-specific recycled, reused, redeployed or potential sale materials before disposal takes place.

### **Asbestos Notification**

Contractor shall give asbestos/demolition notifications to an SRP Safety Representative who will coordinate with an asbestos abatement vendor at least 10 days prior to the project start date.

**5.2 Wildland Fire Mitigation**

Contractors working in National Forest areas shall employ wildland fire mitigation procedures. Before entering National Forest areas, check with your SRP contact to confirm current conditions, fire restrictions and proper mitigation procedures.

- All gasoline- and diesel-powered equipment (except turbocharged equipment) shall be equipped with approved spark arresters per the USDA Forest Service’s Spark Arrester Guide.
- All internal combustion engines shall be inspected before use and periodically thereafter. Equipment not passing inspection cannot be used until repairs are made.
- When staging job sites, crews shall park and stage vehicles in a way that minimizes the potential for exhaust to start a fire.
- Equipment service areas shall be cleared of brush, litter, debris and grass for a radius of at least 50 feet.
- Service trucks shall be equipped with two class ABC pressurized chemical fire extinguishers of not less than 10 pounds capacity, located on each side of the vehicle.
- Service trucks shall have a 5-gallon water bladder and a shovel maintained on the job site.
- Crews shall have provisions that address the need for water to mitigate any potential fire threats.
- Power saws shall be kept in a safe, serviceable condition at all times.
- No smoking while traveling, except on surfaced highways. Smoking is permitted only during breaks in areas having a clearing of at least 3 feet in diameter to bare soil.
- Crews are expected to understand the various fire restrictions used by federal government agencies.

**5.3 Site Facilities and Services****Potable Water**

1. Contractor worksites shall provide an adequate supply of potable water for personnel.

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2. Portable containers used to dispense drinking water shall tightly close and have a tap dispenser. Dipping water from containers is not permitted.
3. Any container used to distribute drinking water shall be clearly marked and not used for any other purpose.
4. Where single-service cups are available, both a sanitary container for unused cups and a receptacle for used cups shall be provided.

### **Toilets**

Toilets shall be provided for employees in accordance with OSHA 1926.51(c). The minimum number is one seat and one urinal per 20 employees. Chemical toilets (self-contained) are permissible where permanent facilities are not available. All toilets shall meet applicable health regulations and be maintained in sanitary conditions.

### **Washing Facilities**

The Contractor shall provide adequate washing facilities for employees engaged in the application of paints, coatings, herbicides, insecticides or any other operations where contamination may be harmful.

### **Lighting**

Construction areas, ramps, runways, corridors, offices, shops and storage areas shall be lighted to not less than the minimum illumination intensities while any work is in progress:

- 5 foot-candles: General construction area lighting, hallways, ramps, warehouse
- 10 foot-candles: Operations involving machinery, carpenter shops
- 30 foot-candles: Offices, first aid rooms

### **5.4 Fire-Retardant Treatment for Wood Products**

The Contractor shall ensure that all plywood and wood framing used on the project site for scaffold, platform or ladder erection, and shed or shack erection have a fire-retardant coating prior to being on the project site. Painting

## **SECTION 5 — ENVIRONMENTAL AND FACILITY-SPECIFIC REQUIREMENTS**

with fire-retardant paint after erection may be acceptable but requires approval by the CC at operating plant sites.

### **5.5 Vehicle and Equipment Exhaust Systems**

Contractor shall maintain the exhaust systems of all vehicles and equipment and perform other measures as necessary to protect against excessive noise and air pollution in compliance with applicable federal, state and local statutes and permit requirements.

### **5.6 Archaeological Artifacts**

Contractor shall acknowledge that project construction sites may have archaeological artifacts. If the Contractor suspects a finding, immediately bring it to the attention of the CC and follow all state and federal regulatory requirements.

### **5.7 Noise Control**

The Contractor shall control noise during construction. Noise transmission to adjacent occupied areas shall not exceed 60 decibels. All internal combustion engines used in connection with construction activities shall be fitted with an approved muffler and spark arrester. Unless otherwise approved by SRP, radios are not permissible.







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