



SAFETY AND HEALTH INFORMATION

CONTRACTOR SAFETY AND HEALTH REQUIREMENTS

CONTRACTOR SAFETY HANDBOOK

CONTRACTOR SAFETY GUIDELINES

**CONTRACTOR
SAFETY AND HEALTH
REQUIREMENTS**

MERCED IRRIGATION DISTRICT

CONTRACTOR SAFETY AND HEALTH REQUIREMENTS

1.	<u>GENERAL</u>	2
2.	<u>REFERENCES</u>	2
4.	<u>DRUG PREVENTION PROGRAM</u>	2
5.	<u>DUTIES OF SAFETY OFFICER (CONTRACTOR'S REPRESENTATIVE)</u>	2
6.	<u>DISPLAY OF SAFETY INFORMATION</u>	2
7.	<u>SITE SAFETY REFERENCE MATERIAL</u>	3
8.	<u>EMERGENCY MEDICAL TREATMENT</u>	3
9.	<u>REPORTS</u>	3
10.	<u>ACCIDENT SCENE PRESERVATION</u>	3
11.	<u>EMPLOYEE REQUIREMENTS</u>	3
12.	<u>PERSONAL PROTECTIVE EQUIPMENT</u>	4
13.	<u>EXCAVATION</u>	5
14.	<u>EXPLOSIVES AND BLASTING</u>	6
15.	<u>MATERIAL HANDLING AND STORAGE</u>	6
16.	<u>ENERGIZED EQUIPMENT</u>	6
17.	<u>ELECTRICAL CLEARANCE DISTANCES</u>	6
18.	<u>STRUCTURE ERECTION</u>	6
19.	<u>EQUIPMENT</u>	7
20.	<u>LIFTING DEVICES</u>	7
21.	<u>GROUNDING, BONDS, AND OTHER PROTECTIVE DEVICES</u>	8
22.	<u>CLEARANCES, HOT LINE ORDERS, AND SPECIAL WORK PERMITS</u>	11
23.	<u>SUBSTATION SAFETY</u>	12

CONTRACTOR SAFETY AND HEALTH REQUIREMENTS

1. GENERAL

- 1.1. This specification section contains minimum safety requirements for the contract. Incorporate additional safety requirements and CPAT training, as needed, to satisfy other state or local regulatory requirements that are more stringent. MID will provide a list of training and administrative requirements at the “Kickoff” Meeting. See “Contractor Safety Handbook” for additional requirements.
- 1.2. The Contractor shall ensure that personnel employed on the project become familiar with and obey District’s regulations. Keep within the limits of the work and avenues of ingress and egress. Wear hard hats and all other required PPE in designated areas. Contractor will not be allowed to enter energized facilities without appropriate clearances and an MID inspector. The Contractor’s equipment shall be clearly marked for identification. See “Contractor Safety Policy” for the Contractor’s administrative duties.

2. REFERENCES

The publications listed below form a part of this specification to the extent referenced.

- 2.1. CAL/OSHA.
- 2.2. Standard for Personal Fall Protection used in Construction and Demolition Operations (2004): ANSI A10.32
- 2.3. Safety Requirements for Personal Fall Arrest Systems (1992): ANSI Z359.1.
- 2.4. Safeguarding Construction, Alteration, and Demolition Operations (1996): NFPA 241.

3. COORDINATION WITH OTHER UTILITIES

Coordinate all work activities with any and all other utilities to assure the presence of required representatives at the location of the work affecting or otherwise involving other utility facilities or property.

4. DRUG PREVENTION PROGRAM

Conduct a proactive drug and alcohol use prevention program for all workers, prime and subcontractor, on the site. Ensure that no employees either use illegal drugs or consume alcohol during work hours. Ensure that no employees are under the influence of drugs or alcohol during work hours. After accidents, collect blood, urine, or saliva specimens and test injured employee influence. A copy of the test shall be made available to the District upon request.

5. DUTIES OF SAFETY OFFICER (CONTRACTOR’S REPRESENTATIVE)

- 5.1. Ensure construction hazards are identified and corrected.
- 5.2. Maintain applicable safety reference material on the jobsite.
- 5.3. Maintain a log of safety inspections performed.
- 5.4. Qualifications of Safety Officer:
 - 5.4.1. Ability to manage the on-site contractor safety program through appropriate management controls.
 - 5.4.2. Ability to identify hazards and have the capability to expend resources necessary to abate the hazards.
 - 5.4.3. Must have worked on similar types of projects that are equal to or exceed the scope of the project assigned with the same responsibilities.
- 5.5. Meetings: Weekly Safety Meetings: Attach minutes showing contract title, signatures of attendees, and a list of topics discussed to the Contractor’s QC daily report.

6. DISPLAY OF SAFETY INFORMATION

Display the following information in clear view of the on-site construction personnel:

- 6.1. Map denoting the route to the nearest emergency care facility with emergency phone numbers.
- 6.2. Activity hazard analysis.
- 6.3. Sign with number of hours worked since last lost workday accident.

7. SITE SAFETY REFERENCE MATERIAL

Maintain safety-related references applicable to the project, including those listed in the article entitled "References." Maintain applicable equipment manufacturer's manuals.

8. EMERGENCY MEDICAL TREATMENT

Contractors will arrange for their own emergency medical treatment. The District has no responsibility to provide emergency medical treatment.

9. REPORTS

- 9.1. Notification: Notify the District, within four hours, of any accident meeting the definition of CAL/OSHA recordable occupational injury or illness. Information shall include Contractor's name; name of activity and location where mishap occurred; date and time of mishap; names of personnel injured; extent of property damage, if any; and brief description of mishap (to include type of construction equipment used, etc.). In addition to CAL/OSHA reporting requirements, initial notification shall be made of any accident involving significant mishaps.
- 9.2. CAL/OSHA Citations and Violations: Provide the District with a copy of each CAL/OSHA citation, CAL/OSHA report, and Contractor response. Correct violations and citations promptly and provide written corrective actions to the District.
- 9.3.

10. ACCIDENT SCENE PRESERVATION

For serious accidents, ensure the accident site is secured and evidence is protected remaining undisturbed until released by the proper MID authority.

11. EMPLOYEE REQUIREMENTS

Contractor shall be Qualified and Certified to perform work in High Voltage Substations.

- 11.1. GENERAL: Employees shall be qualified to perform their assigned duties. Employees shall not work while their ability or alertness is impaired because of fatigue, illness, medications, drugs or alcohol, or any other reason that may expose them or others to injury.
- 11.2. TRAINING: The Contractor shall ensure that each employee entering the work site has experience, training, and, where required, the certification, skills, and knowledge necessary to safely perform their assigned tasks. In addition, the Contractor shall ensure each employee receives initial work site safety orientation, CPAT training conducted by MID, and continued safety and health training addressing the hazards associated with the work and the measures necessary to control or eliminate the hazards.
- 11.3. PHYSICAL EXAMINATION: Each employee who operates the following listed equipment shall be given and pass a Department of Transportation (DOT 49 CFR 391.43) physical examination once every 24 months:
 - 11.3.1. Cranes.
 - 11.3.2. Aerial lift equipment.
 - 11.3.3. Other vehicles as required by Federal and State laws and regulations.A copy of the Medical Examiner's certificate shall be furnished to the MID PM prior to the employee operating the listed equipment. The certificate shall state that the physical examination met the requirements of DOT 49 CFR 391.43.
- 11.4. OPERATORS: Employees operating motor vehicles and other equipment shall be licensed in accordance with applicable Federal and State laws and regulations.

- 11.5. **COMPETENCY:** Upon request, the Contractor shall provide the with assurance of competency of employees operating cranes, aerial lift equipment, heavy equipment, and other motor vehicles by documentation of their experience, training, and licensing.
- 11.6. **QUALIFIED CLIMBER:** For substation and transmission line construction, the Contractor may use qualified employees for climbing duties as defined by OSHA 1910.269. Certification of each employee's qualifications shall be available upon request by the MID PM. Qualified employees with climbing duties shall be subject to the following requirements:
 - 11.6.1. Climbing duties are part of routine job activity.
 - 11.6.2. Documented training and experience that includes hazard recognition and appropriate safe climbing practices and rescue training.
 - 11.6.2.1. Demonstrated experience within the past twelve (12) months on similar structure types to be climbed.

12. PERSONAL PROTECTIVE EQUIPMENT

- 12.1. **GENERAL:** The Contractor shall require personnel to wear protective clothing as required by the nature of their work and as required by governing occupational safety laws and regulations. Construction personnel shall be identifiable by distinctive badges uniform logo, to be worn at all times while on District premises and jobsites, that clearly identify the name of the Contractor and the name of the employee. The Contractor shall be responsible for the identification of need for personal protective equipment in work activities and requiring the wearing of appropriate personal protective equipment in accordance with all OSHA requirements and the following requirements.
- 12.2. **MINIMUM WEARING APPAREL:** All employees shall wear clothing that meets NFPA 70E standard and above-the-ankle leather steel toe work boots.
- 12.3. **NOISE:** The Contractor shall provide hearing protection for personnel as necessary.
- 12.4. **HARD HATS AND SAFETY GLASSES:** All employees entering the area where construction work is in progress, with the exception of the parking area and the interior of shops and offices, shall wear hard hats and safety glasses. Provide hard hats and safety glasses for visitors entering hard hat areas. "Hard Hat Area" signs shall be furnished and erected.
- 12.5. **FALL PREVENTION SYSTEMS AND FALL ARRESTING DEVICES:** Use of body belts and safety straps is acceptable for work positioning. However, in addition to body belts and safety straps, fall prevention/arresting devices shall be worn and used. Fall prevention/arresting devices shall incorporate full body harnesses in conjunction with shock absorbing or retractable lanyards.
 - 12.5.1. Substations, Transmission Lines, and Microwave Towers: Fall arresting devices shall be worn and used in accordance with OSHA 1926.951(b) during construction of electric transmission and distribution lines, substations, and microwave towers. Climbing procedures that do not provide positive fall protection while aloft (e.g., unhooking of a single shock absorbing or retractable lanyard while moving from one work position to another, freehand climbing of structure step bolts while unbelted, etc.) are not acceptable. Positive protection shall be provided via the use of shock absorbing lanyards, retractable lanyards, or by shock absorbing "Y" lanyards equal to Protecta International model no. AE549AW2 (available through Health & Safety Strategies, Inc., 6700 Eastridge Rd., Black Hawk, SD 57718, (605) 787-9023). Provide positive fall protection when more than four (4) feet above the ground while climbing, moving, and working on structures. Provide positive fall protection when more than ten (10) feet above the ground while climbing, moving, and working on fixed electrical equipment in substations. Using bushings on substation equipment for anchorage or climbing will not be allowed.
 - 12.5.1.1. Attachment is optional for qualified climbers only for the following situations:

- 12.5.1.2. To ascend/descend wood pole structures when climbing with the aid of a body belt and safety strap for positioning, except when transitioning crossarms.
- 12.5.1.3. To ascend/descend structures using devices designed for safe climbing such as step bolts and ladders.
- 12.5.1.4. When moving horizontally between work locations on steel lattice transmission line structures.
- 12.5.1.5. When a hazard analysis (prepared by the work supervisor, in consultation with the employees and approved by a second level supervisor) determines that a protected procedure would create a greater hazard than "free-climbing" practices.
- 12.5.1.6. Building Construction and Roofing: Except where OSHA 1926 specifies a lower height, provide positive fall protection when more than ten (10) feet above the ground while climbing, moving, and working.
- 12.5.1.7. Aerial Work Devices: Fall arresting systems shall be worn and used when in aerial work devices. Transitioning to a structure will only be allowed if the aerial work device has a door, step, or ladder designed for that purpose. The lanyard shall be unhooked from the work device and attached to the structure prior to transitioning.
- 12.6. **SCAFFOLDING:** Scaffolding shall be in accordance with OSHA 1926, Subpart L, "Scaffolding". Scaffolds shall be used in lieu of ladders for long-term work procedures.
- 12.7. **LADDERS:** Ladders shall be in accordance with OSHA 1926, Subpart X, "Stairways and Ladders", and the following:
 - 12.7.1. Suspended Ladders: Provide positive fall protection when climbing, moving, or working on suspended ladders.
 - 12.7.2. Ladders of Conductive Material: Ladders with side rails constructed of conductive material shall not be used in substations or on transmission lines.
 - 12.7.3. Ladder Stability: Ladders, except stepladders, shall be held or tied off when being climbed, when being worked from, or when a worker is getting on or off at an elevated position.
 - 12.7.4. Ladder Rungs: Ladder rungs shall have skid-resistant surfaces and shall be maintained as such.
- 12.8. **RESPIRATORY PROTECTION:** The Contractor shall provide a respirator program that meets the requirements of OSHA 1926.103, "Respiratory Protection", and OSHA 1910.134, "Respiratory Protection". Respirators shall be worn by employees exposed to airborne contaminants. Examples of contaminants include, but are not limited to, asbestos, fumes released by welding and cutting on galvanized steel, and fiberglass insulation.
 - 12.8.1. A copy of the program required by OSHA 1910.134(b)(1) through 1910.134(b)(11) shall be submitted prior to use of chemicals or processes requiring respiratory protection, such as sandblasting, etc.
- 12.9. **CHEMICAL PROTECTION EQUIPMENT:** When using chemicals, employees shall wear personal protective equipment such as full face shield, chemical splash goggles, impermeable gloves and boots, disposable coveralls or impermeable clothing, respirators, and any other items recommended by the MSDS or label instructions. If impermeable clothing required for chemical application becomes contaminated on the inside, it shall be disposed of and not returned to service.

13. EXCAVATION

- 13.1. **BURIED UTILITIES:** Prior to start of any excavation, examine the area and determine the location of all buried utilities as required by OSHA 1926.651, "General Requirements", subparagraph (b). Utilities shall be identified with a marker denoting the type of service.
- 13.2. **UNATTENDED EXCAVATION:** Protection of unattended excavations shall be as required by OSHA 1926.651, "General Requirements", subparagraph (l).

- 13.3. **EQUIPMENT ACCESS:** Precautions shall be taken to prevent slides or cave-ins when excavations or trenches are made in locations adjacent to backfilled excavations, or where excavations are subjected to vibrations from adjacent traffic, the operation of equipment, or any other source. A spotter shall assist operators of trucks and equipment when adjacent to excavations as required by OSHA 1926.601, "Motor Vehicles".
- 13.4. **EMPLOYEE PROTECTION:** Protection of employees entering excavations shall be as required by OSHA 1926.651, "General Requirements", and OSHA 1926.652, "Requirements for Protective Systems". The Contractor shall select the protective system appropriate for the excavation and shall submit all data relevant to selection of the protective system, including soil classification data, qualifications for competent person, and any other data listed in OSHA 1926.652, "Requirements for Protective Systems".

14. EXPLOSIVES AND BLASTING

Explosives shall not be used.

15. MATERIAL HANDLING AND STORAGE

Material handling and storage shall be as required by OSHA 1926, Subpart H, "Material Handling, Storage, Use, and Disposal", and OSHA 1926, Subpart V, "Power Transmission and Distribution". Stack heavy material on adequate lagging to prevent shifting. Cylindrical-shaped material such as poles and pipe shall be handled with extra caution to prevent unplanned movement.

16. ENERGIZED EQUIPMENT

Work on high voltage energized buses or equipment is not allowed. Contractor is to coordinate bus or line deenergization with the MID PM.

17. ELECTRICAL CLEARANCE DISTANCES

- 17.1. Equipment, conductive objects, and personnel shall not be brought closer to energized high-voltage facilities (600 V or greater) than the distances listed in the applicable parts of OSHA 1910 and 1926 as listed below. Adequate means of preventing violations of the electrical clearance distances shall be used, such as spotters and equipment stops.
- 17.2. As a general requirement, equipment, conductive objects, or personnel shall not be brought closer to energized facilities than the clearance distances established by OSHA 1926.550, "Cranes and Derricks". The less stringent equipment clearance distances established by OSHA 1926.950, "General Requirements", may be used only when approved in writing by the MID PM.
- 17.3. A notice of the clearance distance limitations required by OSHA 1926.550, "Cranes and Derricks", shall be permanently posted in the operator's cab of cranes, shovels, backhoes, and related equipment.

18. STRUCTURE ERECTION

- 18.1. **GENERAL:** Procedures for erecting structures shall be made a part of the safety and health program. The structure erection plan shall include, but not be limited to, the following subjects: assembly, lifting, shoring, size and type of hoisting equipment, operator qualifications, crane signal/communication, connecting rigging, guying, moving equipment, and protection for adjacent energized power facilities.
- 18.1.1. Structure and building assembly and erection shall be conducted with a minimum exposure to employees from overhead loads and work activities. No one shall be permitted under the load while it is being hoisted into position, except as required to secure the load being set. No one shall be allowed to ride the hook, line, or load.
- 18.2. **COMMUNICATION:** A two-way radio device shall be used to relay information between the spotter and the crane operator when vision is obstructed.

- 18.3. TEMPORARY STRUCTURE SUPPORT: Structures shall have adequate temporary guy cables or other structural support during erection procedures. Temporary structure support shall be approved by a registered Professional Engineer. Temporary guys or structural supports shall remain in place until the permanent guys or structural supports are in place.
- 18.4. TOOLS: Tools and materials shall not be thrown or dropped from structures. Handlines and tool bags shall be used.

19. EQUIPMENT

- 19.1. GENERAL: Equipment shall be designed, manufactured, maintained, and operated as required by OSHA 1926 and OSHA 1910 and the requirements contained in this paragraph. Equipment shall be used only for the manufacturer's intended purpose.
- Riding on Equipment: Riding on equipment is prohibited unless a safe place to ride is provided. A safe place to ride is defined as a permanently affixed seat with passenger restraint device. Getting on or off equipment while in motion is prohibited.
- Brakes: When directed by the MID PM and when otherwise required, carry out a braking performance test on all onsite equipment. Test shall be conducted in the presence of the MID PM and recorded on the form prescribed by the MID PM.
- 19.2. ROLLOVER PROTECTIVE STRUCTURES AND SEAT BELTS: Equipment defined by OSHA 1926.1000, "Rollover Protective Structures (ROPS) for Material Handling Equipment", shall be equipped with rollover protective structures (ROPS) meeting the performance requirements of OSHA 1926.1001, "Minimum Performance Criteria for Rollover Protective Structures for Designated Scrapers, Loaders, Dozers, Graders, and Crawler Tractors". Equipment defined by OSHA 1926.602, "Material Handling Equipment", shall be equipped with seat belts in accordance with the requirements of that section. Agricultural and industrial tractors shall be equipped with the ROPS and seat belts, regardless of date of manufacture. Seat belts shall be worn when operating equipment that is required to be equipped with seat belts.

20. LIFTING DEVICES

- 20.1. GENERAL: Lifting devices shall be designed and manufactured or fabricated for their intended use and shall conform to applicable ANSI standards; OSHA 1910, Subpart N, "Material Handling and Storage"; OSHA 1926, Subpart N, "Cranes, Derricks, Hoists, Elevators, and Conveyors"; and the requirements of this paragraph.
- 20.2. MOBILE CRANES: Crawler, truck, and wheel-mounted cranes shall conform to applicable requirements for design, inspection, construction, testing, maintenance, and operation as prescribed in ANSI B30. The exception in the last sentence of B30.15-0.1 shall not apply. Submit annual inspection records to the MID PM in accordance with ANSI B30.
- 20.3. AERIAL WORK DEVICES: Aerial work devices used to raise, shift, and lower personnel shall conform to applicable requirements for design, inspection, construction, testing, maintenance, and operation as prescribed by ANSI A92, regardless of date of manufacture. Submit annual inspection records to the MID PM in accordance with the applicable ANSI standard.
- 20.4. WORK PLATFORMS: Work platforms suspended from crane load lines will be subject to the approval of the MID PM for each application. The design, use, and testing of the work platforms shall be in accordance with OSHA 1926.550, "Cranes and Derricks".
- 20.5. FABRICATED MOBILE LIFTING DEVICES: Fabricated mobile lifting devices such as truck-mounted A-frames, gin poles, and similar equipment shall be designed, constructed, and certified based on the determinations of a registered Professional Engineer competent in this field. A written contract specific certification shall be provided to the MID PM. Design capacity shall be posted at the operator's station.

- 20.6. **LOAD PERFORMANCE TEST:** Prior to initial use and following modification, alteration, or repair of any component, load test all mobile cranes and fabricated mobile lifting devices at the jobsite and in the presence of the MID PM. Provide test results on forms supplied by the Contractor. Load test shall involve lifting, swinging, and brake holding a load of 100 percent of the load chart rating for a specific configuration and load radius. Configuration, load radius, and test weight shall be chosen to prove the machine's capability and load chart accuracy for its anticipated use. Configuration shall provide a boom angle of at least 30° above the horizontal.
- 20.7. **REPAIRS:** Repairs shall be in strict compliance with manufacturer's instructions. Repairs to structural load carrying parts shall be certified by the manufacturer or a registered Professional Engineer competent in structural analysis. Submit certification to the MID PM.
- 20.8. **RIGGING:**
- 20.8.1. General: The handling, use, and inspection of rigging shall be in accordance with OSHA 1926.251, "Rigging Equipment for Material Handling".
- 20.8.2. Rigging Selection and Analysis: The Contractor shall analyze the requirements and select the rigging equipment appropriate for the load based upon thorough analysis of load data, rated capacities, and manufacturer's recommendations. A copy of the analysis and selection of equipment shall be submitted to the MID PM.
- 20.8.3. Field-Fabricated Devices: The design of field-fabricated rigging equipment and devices shall be certified by a registered Professional Engineer.
- 20.9. **UNKNOWN LOADS:** When lifting an unknown load or a load that cannot be calculated, a load indicating device shall be used. The use of work carts will be approved only when less hazardous methods of performing the work are not feasible.

21. GROUNDS, BONDS, AND OTHER PROTECTIVE DEVICES

- 21.1. **GENERAL:** Electrical circuits, equipment, and conductors; construction equipment; and other conductive apparatus used in proximity of energized facilities shall be considered an electrical hazard to personnel, and shall be considered energized until grounded in an approved manner. No work shall be performed on energized equipment and circuits.
- 21.2. **DEFINITIONS:** The following definitions of terms apply to the protection of personnel from electrical shock:
- 21.2.1. Approved Ground: Approved grounds shall be as follows:
- 21.2.1.1. A station ground mat.
- 21.2.1.2. An installed structure or electrical equipment ground.
- 21.2.1.3. 5/8-inch-diameter copperweld or galvanized rod driven, or screwed, to a depth of at least five (5) feet. When a ground rod is required, install it to a depth of at least five (5) feet to ensure good soil contact. If a rod cannot be installed to a depth of five (5) feet, install additional rods such that a total of at least five (5) feet of rod is buried. Bond these rods together with grounding cables of adequate size based on maximum fault current.
- 21.2.2. Hot-Stick: A hot-stick is a nonconductive tool designed, certified, and approved by the manufacturer for the installation of protective ground leads in accordance with OSHA 1926.951, "Tools and Protective Equipment." Wood hot-sticks shall not be used.

- 21.2.3. Protective Ground Leads: Protective ground leads are those utilized for grounding electrical apparatus and construction equipment. Protective ground leads shall be a minimum No. 1/0 AWG extra-flexible copper or equivalent. Some areas of work may require protective ground leads with greater current-carrying capacity than No. 1/0 AWG due to available fault current. These areas, if they exist on MID's equipment, will be identified in the "Commencement, Prosecution, and Completion of Work" paragraph.
- Ground leads shall be sized to handle the available fault current in accordance with ASTM F 855-90, Table 5. If parallel protective ground leads are utilized, the protective ground leads shall be derated to 90 percent of the values in ASTM F 855-90, Table 5. Parallel protective ground leads shall be of the same size and length. Protective ground leads shall be constructed with commercial connectors installed in accordance with manufacturer's instructions.
- 21.2.4. Protective Ground Lead Connector: A protective ground lead connector is one designed for installation with an insulated hot-stick. A hot-stick may be an integral part of the connector, or the connector may be designed for use with a universal or utility-type hot-stick. Connectors shall be the self-cleaning clamp type and shall have a current-carrying capacity equal to the capacity of the protective ground lead.
- 21.2.5. Grounding: Grounding is electrically connecting a conductive object to an approved ground with a protective ground lead.
- 21.2.6. Bonding: Bonding is electrically connecting a conductive object to other conductive objects with a protective ground lead.
- 21.2.7. Drag-Chain Ground Lead: A drag-chain ground lead is steel or a steel alloy chain securely bolted to the chassis of rubber tired mobile construction equipment. Chain shall have links at least 1 inch in length, and the overall chain length shall be sufficient to provide 1 foot of ground contact when the equipment is not moving. A drag chain is allowable only when no other ground lead is feasible and equipment grounding is required.
- 21.2.8. Three-Phase Grounded Short: Three-phase grounded short means bonding of all three phases of an electrical circuit and connecting to a common approved ground.
- 21.2.9. Barricades: A barricade is a highly visible physical obstruction intended to warn and limit access to a hazardous area. Construct barricades of high-visibility, weather-resistant material such as yellow 1 1/2-inch plastic tape or yellow synthetic fiber rope. Support barricades to avoid displacement and to maintain a height of approximately 42 inches above walking surface. Locate barricades in such a manner that persons obeying the barricade are restricted from contacting conductive objects within the barricade.
- 21.2.10. Barriers: A barrier is a physical obstruction, which is intended to prevent contact with energized lines or equipment and to physically prevent access to other hazardous areas. Barriers are intended to physically prevent children and livestock from entering an area and make the existence of a hazard apparent to all other persons. Fence-type barriers shall be at least 48 inches high and supported to prevent displacement. Supports shall be constructed and located so as to not enhance climbing. If constructed of conductive material, the barrier shall be connected to an approved ground with a protective ground lead. Signs shall be placed on the barrier and shall be 10 inches x 14 inches in size, visible from all approach directions, and read "Danger High Voltage."

- 21.2.11. Grounded Travelers: Grounded travelers are stringing sheaves or blocks used to make electrical ground connection to conductors and conductive pulling lines. They shall be designed and constructed for this purpose. MID requires the use of grounded travelers that incorporate a separate spring-tensioned sheave to provide the contact surface. Grounded travelers shall not be used or considered as a personal protective ground.
- 21.2.12. Isolation Platform: An isolation platform is a working or walking surface used to prevent personnel from contacting two conductive objects or a conductive object and the ground simultaneously. Isolation platforms shall be constructed of plastic or fiberglass shall be at least 5 inches in height, have 9 square feet of working surface, and shall be able to support dynamic loads up to 4,000 pounds. Wood platforms will not be allowed. Isolation platforms shall be maintained free of dirt, dust, and contamination. When used on wet or soft ground, additional supports shall be provided to ensure the entire platform stays above the ground surface.
- 21.2.13. Electrical Insulating Boots: Electrical insulating boots shall not be used as a primary means of electrical protection unless other methods of performing the work are not feasible and they have been approved by the MID PM. If used as secondary protection, boots shall be dielectric rubber boots with an electrical insulation value equal to or greater than 18 kV as tested in accordance with ANSI Z41.4-83. A program shall be developed and implemented requiring daily inspection of the boots, the testing of the insulating property of the boots on a regular basis, boot replacement criteria, and the instruction of workers on the care and use of the boots.
- 21.2.14. Grounded Work Mat: A grounded work mat is a working or walking surface used to eliminate step potentials in a work area. The mat may be constructed of woven wire fencing or concrete reinforcing mesh and shall be grounded to an approved ground within ten (10) feet of the mat. Access to the mat shall be accomplished with an isolation platform and barriers or barricades as required shall be installed.
- 21.3. TESTING AND CERTIFICATION:
- 21.3.1. Protective Ground Leads: Protective ground leads, including the connectors, shall be tested and certified to the "Withstand Rating" current values shown in ASTM F 855-83, Table 5, and shall have an identification tag. For substation protective ground leads, a proportional current and voltage test method shall be used to verify a voltage drop of less than 100 V for a minimum 15-cycle clearing time for the required withstand rating of the protective ground lead. For transmission line protective ground leads, a proportional current and voltage test method shall be used to verify a voltage drop of less than 75 V for a minimum 30-cycle clearing time for the required withstand rating of the protective ground lead. Protective ground leads shall be retested and recertified annually. A protective ground lead without an identification tag to relate it to the annual certification of that protective ground lead shall not be used.
- 21.3.2. Grounded Travelers: Grounded travelers with a separate spring-tensioned sheave shall be designed, tested, and installed to provide 1 ohm or less resistance between the grounded traveler and the protective ground lead connection. The tests shall be performed at the work site in the presence of a representative from MID. Periodic retesting of grounded travelers may be performed as requested by MID.

22. INSTALLATION AND REMOVAL OF PROTECTIVE GROUND LEADS

Installation and removal of protective ground leads shall be in accordance with OSHA 1926.954, "Grounding for Protection of Employees".

23. CLEARANCES, HOT LINE ORDERS, AND SPECIAL WORK PERMITS

23.1. GENERAL: Secure information concerning which facilities are energized at or near each work site. Take all necessary precautions for the safety of personnel, and keep employees fully informed of the work situation and safe work limits. Information concerning MID's facilities or other facilities under the operational control of MID shall be obtained from the MID PM.

23.2. DEFINITIONS:

23.2.1. Clearance: Clearance is a procedure whereby energized electrical facilities are deenergized; and switches, disconnects, and circuit breakers are tagged or locked to prevent reenergization.

23.2.2. Hot Line Order: Hot Line Order is a procedure whereby adjacent electrical facilities may remain energized during Contractor operations, but provides that if any circuit breaker connected to the facility opens under fault conditions, it will not be reclosed until all employees and equipment working in the area are determined to be in the clear.

23.2.3. Special Work Permit: Written permit issued by an MID inspector, which indicates the limits of the work areas, restrictions, and conditions pertinent to the work. It is issued to the Contractor's authorized representative for all Contractor activities on or near facilities under the operational control of MID. The Contractor's authorized representative shall be the superintendent or other supervisors designated by the superintendent in writing.

23.3. PROCEDURES TO OBTAIN CLEARANCES AND HOT LINE ORDERS:

23.3.1. Clearance and Hot Line Order requests shall be made in writing according to MID procedures as explained in the "Kickoff" Meeting. Special Work Permit requests shall be made in writing according to MID procedures as explained in the "Kickoff" Meeting.

23.3.2. Request shall include the plan of operation indicating the Contractor's authorized representative under whose direction the work will be performed, the work to be done, sequence of operations, time to start work, duration of work, number of employees and their classifications, safety precautions to be taken, type and location of barricades, warning signs, protective grounds, and description of equipment to be used in performing the work.

23.3.3. Following approval of the Contractor's plan of operation, and after obtaining a Clearance or Hot Line Order, the MID inspector will issue a Special Work Permit to the Contractor's authorized representative.

23.4. SPECIAL WORK PERMIT PROCEDURES:

23.4.1. Special Work Permit will indicate the limits of the work area, restrictions and conditions pertinent to the work including Clearance or Hot Line Order, or both issued by MID. Both the Contractor's authorized representative and the MID inspector shall sign the Special Work Permit and each retains a copy. The Contractor's authorized representative shall remain onsite when work is being performed under a Clearance or Hot Line Order.

23.4.2. Review the Special Work Permit and limits of the work area with employees before proceeding with the work, and as frequently thereafter as necessary to ensure that all employees are knowledgeable of the work program and the required safety precautions.

- 23.4.3. After receipt of a Special Work Permit for a Clearance and prior to commencement of any work, install 3-phase grounded shorts under the observation of the MID inspector.
- 23.4.4. Test and ground the circuit to ascertain it is deenergized. Use of audio/visual voltage testers to “buzz out” the circuit is not allowed.
- 23.4.5. Install the protective ground leads by first attaching the leads to the approved ground.
- 23.4.6. Attach the protective ground leads to the deenergized circuit with a hot-stick maintaining clearance distances contained in Table V-1 -1 of OSHA 1926, Subpart V, "Power Transmission and Distribution until all ground leads are attached. This clearance distance requirement shall be maintained between all parts of the workman's body and the protective ground lead being attached.
- 23.4.7. Document location of protective ground leads on the Special Work Permit.
- 23.4.8. Additional grounding may be required depending on type and location of work being performed.
- 23.5. **PROCEDURES FOR RELEASE OF A SPECIAL WORK PERMIT:**
After the work has been completed, the Contractor shall advise the MID inspector and the following will occur:
 - 23.5.1. The MID inspector will check to determine that the equipment installed or modified is satisfactory for normal service or energization, or is in safe condition for the action to be released.
 - 23.5.2. The Contractor shall then remove all protective ground leads, bonds, and other protective devices under the observation of the MID inspector and in the reverse procedure specified in subparagraph d. (3) above.
 - 23.5.3. The Contractor's authorized representative holding the Special Work Permit shall sign both copies of the release of the Special Work Permit certifying that all personnel and equipment are in the clear, and will remain in the clear, and that all protective ground leads, bonds, and protective devices have been removed.
 - 23.5.4. **TRANSFER OF RESPONSIBILITY FOR SPECIAL WORK PERMIT:** If necessary to transfer responsibility for work under a Special Work Permit from one Contractor's authorized representative to another, the following shall occur:
 - 23.5.4.1. A new Special Work Permit will be issued to the Contractor's new authorized representative by the MID inspector with an explanation of the limits of the work defined thereon.
 - 23.5.4.2. The MID inspector and the Contractor's new authorized representative will review the location and integrity of all protective ground leads, bonds, and other protective devices.
 - 23.5.4.3. The old Special Work Permit will then be released.

24. SUBSTATION SAFETY

- 24.1. **GENERAL:** In addition to the requirements contained in OSHA 1926, Subpart V, "Power Transmission and Distribution", and other applicable OSHA requirements, the requirements contained in this paragraph apply.
- 24.2. **SUPERVISION AND AUTHORIZATION:** All work shall be performed under the immediate supervision of the Contractor's superintendent. No work shall be performed in or near an energized facility that is under the operational control of MID until authorization to proceed and a Special Work Permit is obtained from the MID inspector, when appropriate. MID inspector shall be present at all time work is being performed.
- 24.3. **ELECTRICAL EQUIPMENT CONTAINING SF₆:**
 - 24.3.1. **GENERAL:** The SF₆ insulating gas in electrical equipment poses a potential health problem to exposed employees. In its pure state, SF₆ gas is about five (5) times heavier than air and is a simple asphyxiant. Electrical arcing can cause SF₆ gas to

separate into chemical components. When the arc is removed, the chemical components will recombine to form SF₆ gas but may leave extremely hazardous by-products. It is imperative to avoid skin contact with, inhalation of, and ingestion of these by-products. The solid portions of these by-products are usually in the form of a white or gray powder, which may be found on the interior of gas confinement areas of the equipment.

24.3.2. INSTRUCTIONS AND STANDARDS: Prior to opening the SF₆ gas containment areas of the equipment, all employees shall be informed of the pertinent sections of the MSDS for SF₆ gas and the manufacturer's instructions for equipment disassembly. Manufacturer's instructions on opening up the electrical equipment containing SF₆ gas shall be followed to prevent accidents from sudden release of high-pressure gas. Comply with OSHA 1926.21, "Safety, Training, and Education", subparagraph (b)(6), for confined space entry in all cases where employees must enter the electrical equipment.

24.3.3. PROTECTIVE EQUIPMENT: Because of the danger to employees of SF₆ by-products, the Contractor shall not open any piece of electrical equipment containing SF₆ gas which has been exposed to electrical arcing unless the employees involved are protected with the equipment listed below. The protective equipment as specified in the MSDS and as listed below shall be worn until a thorough examination reveals that no SF₆ by-products are present.

24.3.3.1. Either self-contained breathing apparatus or airline respirators supplying breathing quality air.

24.3.3.2. Chemical safety goggles if eyes are not protected by the above mask.

24.3.3.3. Impermeable gloves.

24.3.3.4. Disposable coveralls.

24.3.3.5. Portable Eye Wash/Shower: A portable eye wash capable of fifteen (15) minutes of flushing at .4 gpm shall be located within twenty (20) feet for emergency decontamination of employees.

24.3.3.6. Disposal of SF₆ By-Products: Disposal of all SF₆ by-products shall be in accordance with Federal, State, and local regulations.

24.3.4. ADDITIONAL REQUIREMENTS:

24.3.4.1. Control Panels: Work on energized control panels shall be in accordance with OSHA 1926.957, "Construction in Energized Substations", and shall include the use of accident prevention tags.

CONTRACTOR SAFETY HANDBOOK

CONTRACTOR SAFETY HANDBOOK

TABLE OF CONTENTS

	Page
Use of This Book	3
Emergency Procedures	3
MID Safety Policy	4
Accident Reporting	4
Control of Utilities	4
Fire Protection & Security Systems	4
Housekeeping	5
Security	5
Storage	5
Tools and Equipment	6
Vehicles	6
Work Areas	6
Compressed Gases	6
Confined Spaces	6
Cranes and Hoists	7
Electrical Safety	7
Emergency Equipment	8
Environmental Exposures	8
Excavations and Trenches	8
Floor Openings	9
Hazard Communication	9
Ladders	9
Personal Protective Equipment	9
Safety Training	10
Scaffolding	10
Warning Signs	10
Welding and Cutting	10
MID Safety Rules	11
Contacts	11

CONTRACTOR SAFETY HANDBOOK

USE OF THIS HANDBOOK

The Merced Irrigation District (District) is providing you with this handbook to make you aware of important health and safety information and requirements. It is the contractor's responsibility to provide to the District all appropriate copies of all permits, MSDS, Certificates of Insurance, or any other forms that may apply.

Read it carefully and keep it in a convenient location at the job site so you can refer to it as needed. Please take special note of emergency and accident reporting procedures.

The District wants your work to be as safe and pleasant as possible. Help us accomplish that goal by following these safety rules.

EMERGENCY PROCEDURES

When An Emergency Occurs:

- Give life-saving first aid or take other appropriate measures until help arrives.
- Call Emergency Medical Services at 911
- Post Emergency Action Plan on site

What To Report:

1. Give your name, the location you are calling from, and the number you are calling from.
2. Describe the nature of the emergency as you see it:
 - fire in an electrical panel
 - worker has fallen off ladder, appears to have a broken ankle
 - worker is having chest pains (severe, mild, etc.)
3. Do not hang up until you are told to do so.

Stand By To Assist:

Be prepared to assist on-site Emergency Personnel.

MERCED IRRIGATION DISTRICT SAFETY POLICY

The District believes safety is a critical component of every job. Therefore, any work you do on District premises must be performed safely. As the contractor you must obey all safety rules, regulations and safe work practices specified in Cal/OSHA regulations, District policies and procedures, and the contract agreement. The contractor must have a current Injury and Illness Prevention Program.

Contract supervisors have the responsibility to make sure that all employees under their supervision are adequately trained and informed of all applicable safety practices, and to make sure that employees are provided with and wear safety equipment necessary for the tasks they are performing.

If the contractor fails to obey all safety rules and work practices, including the use of safety equipment, the contractor will be subject to disciplinary action, up to and including immediate expulsion from District premises and being barred from future work.

If you have questions regarding the District's safety requirements, or about the safety of a particular operation or activity, contact Jeff Joyner, (209)722-5761 office or (209)349-2096 cell.

ACCIDENT REPORTING

You must report all accidents and injuries to Risk Management Officer, Eric Couture, no matter how minor. Call (209) 722-5761 office or (209)777-5257 cell. All accidents will be investigated to determine the cause(s) and to reduce the potential for recurrence. All serious accidents will be investigated by the Contractor, and the Merced Irrigation District Department Manager.

CONTROL OF UTILITIES

It is important that work does not affect critical services to the District. The contractor must not, under any circumstances, operate any switch or valve that controls building services, processes, or equipment unless authorized to do so.

A lockout and tagout system must be used to identify and secure switches and controls in the off position while work is performed. For additional information on lockout/tagout, refer to the section in this handbook entitled "Electrical Safety." (Page 8)

FIRE PROTECTION & SECURITY SYSTEMS

Many District buildings are protected by fire and security systems. To ensure continuous protection of employees and property, these devices must not be operated or tampered with unless authorized by the appropriate manager of the concerned area, Security, Claims and Investigations or Safety Section.

If any fire protection systems must be temporarily shut down or impaired to perform your work, it must be coordinated with the Safety Section and Department.

If the job involves potential hazards, such as welding or cutting, it will be necessary to have a welding permit and a "fire watch" must be established. (See *Welding and Cutting* on page 11.)

ALL FIRE PROTECTION & SECURITY SYSTEMS MUST BE RESTORED TO SERVICE BY THE END OF THE WORK SHIFT.

HOUSEKEEPING

Accidents are rare in areas with good housekeeping. To help prevent injuries and contribute to a more pleasant work environment for everyone, **do your part.**

Work areas must be kept neat and orderly at all times.

- Aisles and other walking surfaces must be kept free of equipment, tools, materials, and debris.
- Tools, equipment, and materials must not impact areas occupied by District employees.
- Arrange extension cords and hoses so people cannot trip over them. To run a cord or hose across an aisle, contractors need to get approval from the Safety Section.
- Clean up spills right away.
- When necessary, use barricades to keep unauthorized employees out of the work site.
- Debris and scrap materials from the job must be cleaned up on a regular basis - at least once per shift.

SECURITY

1. CONTRACTOR IDENTIFICATION

When you arrive at the District you, and members of your staff, must obtain either visitor passes for short term (one day) jobs or, proper MID name/security badges. You will be given a temporary identification badge that will designate you as a contractor, or consultant, authorizing you to enter the building. You must wear the badge so that it can be seen. Please return the badge to Security when you exit the building or at the completion of the job.

2. The use of alcoholic beverages or illegal drugs on the job is prohibited.

3. TOOL AND EQUIPMENT INSPECTIONS

All tools, equipment, and other items brought onto or removed from District premises are subject to inspection by Security or the Safety Section. Use of damaged or defective equipment is prohibited.

Tools and other items belonging to contractors should be clearly marked with the name of the company to simplify identification.

4. The District does not allow smoking in or at most sites. You may smoke in designated areas only. Check with the management in charge of the facility you are working for those designated areas.

STORAGE

Tools, equipment, materials, and debris must be properly stored to comply with building and fire codes, and to avoid a hazard to District employees and others.

Never store equipment in aisles, corridors, or stairwells.

All debris must be removed daily.

TOOLS AND EQUIPMENT

Tools and equipment must be in good condition to prevent injuries. Damaged or defective equipment will not be allowed on District premises. The contractor's Safety Officer is responsible for performing a daily tool inspection. Do not use damaged or defective tools.

Contractors may not use District tools and/or equipment without prior approval.

VEHICLES

1. PARKING

Parking in reserved areas, sidewalks, roadways, red curb zones, or handicapped parking spaces is prohibited. Improperly parked vehicles will be towed at the contractor's expense.

2. Shipping and Receiving docks are to be used for loading or unloading only.

3. SPEED LIMITS

Maximum speed limit for parking lots and roadways is 10 mph and 25 mph on main streets. Please obey this limit for your safety and that of others.

4. BACK-UP ALARMS

All haulage vehicles, forklifts, etc. must be equipped with audible alarms that sound continuously while the vehicle is backing up.

WORK AREAS

We ask that activities be confined to the area(s) where work is to be performed. Reasonable use of rest rooms, lounges, and vending machines is expected.

COMPRESSED GASES

GAS CYLINDERS MUST BE STORED SAFELY

A compressed gas cylinder that falls can severely injure a worker's foot.

Since compressed gas cylinders hold gas under pressure, it can become a dangerous missile if it is damaged in any way. The gas itself can also be hazardous. All compressed gas cylinders must be properly secured in an upright position for both storage and use. The most vulnerable part of a compressed gas cylinder is the valve. To prevent damage to the valve and stem, valve caps must be kept in place when cylinders are not in use.

Oil or grease plus oxygen may explode or catch fire. Be sure hands and tools are very clean when handling oxygen cylinder valves, regulators, gauges, or fittings.

Finally, use the proper hand truck to move cylinders. Do not drag, drop, or bang cylinders together.

CONFINED SPACES

The District has a Confined Space Entry Program that requires all contractors to have a Confined Space Entry Program if they are going to be entering a confined space. Confined spaces include any location which because of limited access, inadequate ventilation, and or the presence of hazardous gases, vapors, or particulates, may

present a health hazard.

The District's Confined Space Entry Program states that all work in confined spaces requires a "Confined Space Work Permit." Permits must be obtained on a daily basis from the Safety Section.

This permit lists a number of precautions that must be taken before workers will be allowed to enter a confined space. These precautions include, but are not limited to:

- Removal of any hazardous contents from the space. This may involve purging the space with fresh air or water.
- Disconnecting and capping or properly locking out all input lines which discharge into the space.
- Tagging and locking in the "Off" position all disconnects to any electrical or mechanical devices within the space. One key to the lock is to be kept by the person performing the job. The other key is to be retained by the supervisor for emergency use.
- All personnel working in the confined space must be trained in first aid and CPR, rescue procedures, the use of safety equipment, as well as the proper use of respiratory protection.
- No one can work in a confined space until it has been determined, by testing, that sufficient oxygen is present and the space is free of hazardous concentrations of air contaminants. This is to be recorded on the entry permit.
- Any space that contains a hazardous concentration of air contaminants, or is found to contain an insufficient concentration of oxygen, may not be entered until the contaminant is removed or sufficient oxygen is supplied through proper ventilation.
- Other requirements may be specified on the permit, depending on the particular hazards of the confined space.

CRANES AND HOISTS

All cranes, hoists, and other material lifting equipment used on District property must be in good repair and inspected daily. It is the contractor's responsibility to see that all employees are properly trained.

Be careful that the lifted load does not exceed the rated capacity of the equipment. Never use a crane or hoist which does not have the load capacity clearly marked.

Only trained employees may use mechanical lifting devices.

No one will be allowed to work or pass under a suspended load.

The swing radius of rotating cranes must be barricaded to prevent employees and others from being struck by the rotating body of the crane.

ELECTRICAL SAFETY

Contact with live electrical circuits can cause serious injury or death. Only experienced electricians who have been thoroughly trained in electrical safety procedures may install, repair, modify, or remove electrical service, wiring, and equipment.

Any electrical work done on District property must comply with Cal/OSHA and District regulations.

All electrical equipment used on the job must be properly grounded. Portable tools and appliances protected by an approved system of double insulation are not required to be grounded.

Extension cords must be the three-wire type for grounded tools, and must not have any cuts, frayed insulation, or splices. Cords must not be run through doorways where the door could cut or damage the cord.

Electrical work must not pose a hazard to District employees or visitors.

- Unguarded energized parts cannot be left unattended, even momentarily.
- All energized parts, panels, junctions, etc. must be properly guarded and posted whenever you are not working on them.
- The District requires a two-person work crew as an additional precaution for high voltage work (e.g., 440 v.a.c. & up).
- Lights or portable tools used with or around flammable and combustible liquids should be explosion proof. If possible, all flammable and combustible liquids should be moved to a safe place.

EMERGENCY EQUIPMENT

Fire equipment, such as fire extinguishers and hoses, is not to be moved, blocked, or otherwise rendered unavailable or unusable in the event of an emergency, unless specific written approval is first obtained from the Safety Section.

First aid equipment, stretchers, eyewash fountains, and deluge showers are not to be moved, removed, or blocked without written permission of the Safety Section.

ENVIRONMENTAL EXPOSURES

Construction work can expose personnel to a variety of potentially harmful environmental factors such as dusts, mists, fumes, gases, noise, ultraviolet and infrared light, and solvent vapors. It is the contractor's responsibility to ensure that his employees are not exposed to any of these environmental factors in excess of the safe limits as specified by Cal/OSHA.

Whenever paints, adhesives, or other vapor-producing materials on wall floors and other parts of District buildings are utilized, exhaust ventilation must be provided to prevent the build-up of harmful levels of vapors and noxious odors.

The use of equipment with internal combustion motors is prohibited in District buildings. This will eliminate the hazard of carbon monoxide build-up.

EXCAVATIONS AND TRENCHES

Before any excavation work, the existence and location of underground pipes and utilities must be determined. DIG Alert and District utility locators must be contacted prior to commencing any excavation or trench work.

All excavation and trench work must comply with Cal/OSHA requirements.

All trenches and excavations must be properly protected to prevent persons from accidentally falling in. Barricade lighting may have to be provided to ensure adequate warning at night.

FLOOR OPENINGS

All floor openings must be protected to prevent persons or equipment from accidentally falling into them. All floor openings must be covered by planking or plywood of adequate strength to support any possible load. Coverings must be posted with signs reading "*Floor Opening - Do Not Remove.*"

HAZARD COMMUNICATION

The District believes that all employees and contractors have the right to complete information on the hazardous materials used within the District.

The District will inform contractors of any hazardous chemicals or materials used by the District that employees may come in contact with in the course of the contract. Information includes:

- Material Safety Data Sheets (MSDS) describing the hazards and precautions associated with the chemicals.
- An explanation of the labeling system for chemicals and containers.
- Information on the specific substances used or processes at or near the job site.

The contractor must provide the District with similar information for the chemicals and materials to be used during the scope of the contract.

If in the course of the work the contractor comes across any unknown or unlabeled chemicals, the District's Officer, Safety Services or the District's HAZMAT team must be contacted immediately.

LADDERS

All ladders used on District premises must be of fiberglass and or aluminum construction, equipped with anti-skid feet, and labeled with the Contractor's name.

Aluminum ladders cannot be used when working on electrical circuits and equipment.

Defective ladders will not be allowed on District property.

Contractors may not use District owned ladders.

PERSONAL PROTECTIVE EQUIPMENT

Personal protective equipment, such as safety glasses, gloves, and hard hats are needed for construction and maintenance activities. The type of equipment required will be determined by the contractor's Safety Officer/Supervisor and by the Districts safety requirements.

The contractor must provide employees with any required personal protective equipment and train the employees in proper care and use.

The contractor will not be allowed to use any of the Districts safety equipment.

The contractor is expected to follow all posted requirements for use of personal protective equipment to be worn for a particular job.

SAFETY TRAINING

The contractor will train employees in the recognition and avoidance of unsafe conditions and all Cal/OSHA regulations applicable to the work to be performed. This training may include, but is not limited to:

- Entry into Confined Spaces.
- Respirator Use.
- Work with Hazardous Materials.
- Use Powder-actuated Tools.
- Oxygen/acetylene or Arc Welding and Cutting.

SCAFFOLDING

Scaffolds and work platforms more than ten feet above the floor or ground must have guardrails and toe boards. Scaffolds higher than four feet, but less than ten feet high, and less than 45 inches wide must have guardrails on all open sides.

All scaffolds must be provided with an access ladder or other safe means of access. Employees shall not climb on scaffold bracing and poles.

If employees work on elevated work platforms (e.g. roofs) or scaffolds more than ten feet from the floor that cannot be equipped with guard rails, they must be protected by fall protective devices. The District requires full body harnesses be used.

WARNING SIGNS

Warning, safety, and security signs, notices, and barriers are in place for employee protection. They must be observed and followed. (For example, when working in a posted "Eye Hazard" area, employees must wear approved eye protection.)

When the work being performed exposes District Employees or others to hazards, warning signs, barriers, or barricades must be provided.

WELDING AND CUTTING

Welding, cutting, brazing, or torch soldering on District premises requires a "Welding and Cutting Permit." Permits must be obtained by a Maintenance Supervisor of the section work is being performed at or by the Safety Section at the start of each day's shift. A Fire Watch is required for all "hot" operations. Sparks and slag can easily start a fire, so be sure to protect or remove all combustible materials in the area before beginning hot work.

A fire extinguisher is required to be at hand whenever hot work is performed. **Contractors must provide their own extinguisher.** Do not use any District extinguisher's, except in an emergency.

Exhaust ventilation is required whenever welding or cutting in confined spaces, or where the fumes may present a health or nuisance exposure to District Employees or others.

If arc welding or cutting is performed in occupied areas, welding curtains or other shielding must be used to protect the occupants from ultraviolet light.

MERCED IRRIGATION DISTRICT SAFETY RULES

1. All injuries must be reported to a supervisor and the Safety and Risk Management Services immediately, no matter how minor. This is for everyone's protection.
2. Employees are to use proper lifting procedures when lifting heavy objects. Help should be required to lift heavy or bulky items.
3. Sturdy work type shoes are required at all times. Canvas cloth or open toed shoes are not allowed.
4. Safety Goggles/Glasses are to be worn at all times while working with air blowing equipment. Never use an air hose to blow cloths off and never blow in the direction of other people.
5. Do not operate any piece of equipment without its safety guards/systems in place.
6. Wood pallets are never to be stood on end.
7. Only authorized forklift operators are allowed to operate these vehicles on District property. Drivers need to watch out for pedestrians.
8. Keep work areas clean. Watch for tripping hazards and remove them whenever possible.
9. Obey all safety signs and barriers. They are there for everyone's protection.
10. Know the location of all fire extinguishers and exits.
11. Be Safe.

CONTACTS

Safety Section: (209) 722-5761 or (209)777-5257 cell

Human Resources: (209) 354-2082

**CONTRACTOR
SAFETY GUIDELINE**

CONTRACTOR SAFETY GUIDELINE

TABLE OF CONTENTS

	Page
Purpose	3
Administrative Duties	3
Explanation of Responsibilities	4
Guidelines for Contractor Safety	5
Guidelines for Information Exchange	6
Training Requirements	9
Recordkeeping Requirements	9
Contacts	10

CONTRACTOR SAFETY GUIDELINE

Good communication is a necessary element of maintain safety at construction sites. Communication among the District and contractors must identify safety hazards and prevention practices that each brings to the worksite. Therefore, Merced Irrigation District has implemented the following contractor safety program for our worksites so that on the job injuries are minimized and work practices may be standardized.

PURPOSE

This written contractor safety policy establishes guidelines to be followed for contractors working at our company.

The Rules Established:

- Provide a safe working environment.
- Govern facility relationships with outside contractors.
- Ensure that contractor employees and our employees are trained to protect themselves from all potential and existing hazards.

The effectiveness of the contractor safety program depends upon the active support and involvement of all employees. This plan is intended to implement a program to ensure that all contractor work practices are carried out safely to minimize the possibility of injury or harm to the contractors' employees our own employees. It is intended to serve as an additional tool in safeguarding the health and safety of employees.

The contractor safety policy establishes uniform requirements designed to ensure that contractor safety orientation, coordination, and safety administration practices are communicated to and understood by employees.

The District provides a "Contractor Safety Handbook" to be adhered to by contractor employees on MID sites or premises.

This document is provided to ensure all safety plans, policies and procedures are communicated to all participating contractors. It also provides an avenue for contractors to communicate their safety plans, policies and procedures to the District. This program aims to prevent personal injuries and illnesses.

ADMINISTRATIVE DUTIES

The Safety Section is responsible for developing and maintaining the program. A copy of the plan may be reviewed by employees. It is located in the Safety Section or on-site for projects. In addition, project manager is responsible for maintaining any records related to the contractor safety program.

If after reading this program, you find that improvements can be made, please contact the Safety Section. We encourage all suggestions because we are committed to the success of our contractor safety program. We strive for clear understanding, safe behavior, and involvement from every level of the District.

EXPLANATION OF RESPONSIBILITIES

MID Responsibilities

MID has specific safety responsibilities when hiring contractors to come onto the worksite, onto the grounds, or into the buildings or facilities to perform work. Our responsibilities when hiring contractors include the following listed steps.

MID Will:

1. Take steps to protect contract workers who perform work on or near a potentially hazardous process.
2. Obtain and evaluate information regarding the contract employer's safety performance and programs.
3. Inform the contractor of known potential fire, explosion, or toxic release hazards related to the contractor's work and the process.
4. Explain the applicable provisions of the emergency action plan to the contractor, and require that the contractor disperse that information to all workers who will work at this site.
5. Develop and implement safe work practice procedures to control contract employee entry into MID hazardous work areas.
6. Maintain a contract employee injury and illness log utilizing contractor provided information.
7. Periodically evaluate the contract employer's fulfillment of his or her responsibilities under this policy.

Contractor Responsibilities

Contract employees must perform their work safely. Considering that contractors often perform very specialized and potentially hazardous tasks, such as confined space entry activities and non-routine repair activities, their work must be controlled. Contractor responsibilities when accepting contracts with the District include the following listed steps.

The Contract Employer Will:

1. Assure that the contract employee is trained in the work practices necessary to safely perform his or her job.
2. Instruct the contract employee in the potential fire, explosion, or toxic release hazards related to his or her job and the process.
3. Assure that the contract employee knows the applicable provisions of the emergency action plan.
4. Document contract employee training.
5. Inform contract employees of and then enforce safety rules of the facility, particularly those implemented to control the hazards of the contracted process during operations.
6. Require that all subcontractors abide by the same rules to which the contractor is bound by this section.
7. Abide by the facility smoking rules. Smoking is prohibited inside all MID facilities.

8. Therefore, permission must be requested before the contractor's employees are allowed to smoke in any area.

GUIDELINES FOR CONTRACTOR SAFETY

The following listed steps are the standard procedures for evaluating and choosing contractors who will work on-site at MID.

Obtain and evaluate information regarding a contractor employer's safety performance and programs when selecting a contractor to perform any type of contract work that might bring them into contact with any hazardous chemical or process on the premises of MID.

To determine that past safety performance, the group or individual selecting the contractor should consider the contractor's:

- Employee injury records such as Experience Modification Rate (EMR or MOD) for workers' compensation for the past three years and the contractor's past safety record in performing jobs of a similar nature.
- OSHA log, which includes the injury and illness rates (number of lost-time accident cases, number of recordable cases, number of restricted workday cases, number of fatalities) for the past three years.
- Incidence rates for lost-time accidents and recordable for the past three years.
- Written safety program, training system, and HAZCOM policy.
- Supply emergency contact information to MID and post Emergency Action Plan at the job site.

For contractors whose safety performance on the job is not known, obtain information on injury and illness rates and experience and obtain contractor references.

Contractor shall ensure work methods, practices and experience are evaluated, and adequate for the jobs in question. The contractor and its employees shall have appropriate:

- Job skills
- Equipment
- Knowledge, experience, and expertise.
- Any permits, licenses, certifications, or skilled trades people necessary to be capable of performing the work in question.

The contractor must be willing and able to provide a current certificate of insurance for workers' compensation and general liability coverage with the contracting company.

Each contractor must be responsible for ensuring that its employees comply with all applicable local, state, and federal safety requirements, as well as with any safety rules and regulation set forth by MID, at which it is performing the contracted work.

Possible ways to determine past compliance with such safety regulations include:

- Requesting copies of any citation for violations occurring within the last three years, to determine the frequency and type of safety laws violated.

- Having all bidders on jobs describe in detail in writing any safety programs in place at the contractor, will provide to MID with a solid background on that contractor's safety performance and adherence to safety rules and regulations.

GUIDELINES FOR INFORMATION EXCHANGE

Merced Irrigation District Guidelines for Information Exchange

Before Contract Work Begins, MID Will:

1. Designate a representative to coordinate and communicate all safety and health issues and communicate with the contractor. The designated representative will have a copy of the work document, be thoroughly familiar with its contents, and with the safety and health aspects of the work, or know who to call to obtain this information. The designated representative is responsible for ensuring that all MID responsibilities listed below are carried out.
2. Provide a copy of MID's IIPP and HAZCOM policy and any specific written safety policies and procedures of the facility to the contractor.
3. Inform the contractor of any emergency signals and procedures that may be put into operation in areas where the contractor's employees are working. The contractor should be given the telephone numbers of the nearest hospital, ambulance service, and fire department.
4. Conduct an inspection of the proposed worksite area before the pre-start up meeting so any known information about on-site hazards, particularly non-obvious hazards, are documented and thoroughly communicated to the contractor.
5. Work directly with the contractor's designated representative, with whom all contacts should be made.
6. Conduct a pre-start up meeting (walk through) with the contractor's designated representative, and a supervisor from each of the areas of the plant involved in the contractor's work.
7. Review all contract requirements related to safety and health with the contractor's designated representative, including, but not limited to, rules and procedures, personal protective equipment (PPE), ad special work permits or specialized work procedures. Advise the contractor that the facility safety and health policies must be followed. A copy of the facility's safety plans must be furnished to the contractor.
8. Inform contractor's designated representative of the required response to employee alarms and furnish the contractor with a demonstration or explanation of the alarms.
9. Communicate thoroughly with the contractor's designated representative any safety and health hazards (particularly non obvious hazards and hazard communication issues) known to be associated with the work, including those in areas adjacent to the worksite. Tell them it is the contractor's responsibility to convey this information to its employees.
10. Review preparation of worksite before contractor begins initial work.
11. Identify connect-points for MID services, such as water and electricity, etc. Contractor shall be responsible for all other services and define any limitations of use of such services.

12. Provide the contractor with a copy of MID's "Contractor Safety Handbook".
13. Ensure that all affected MID employees receive training on any or all hazards introduced by a contractor or their subcontractors. Contractor shall be responsible for that training.

During Contract Work, MID Must:

1. Limit, as necessary, the entry of MID employees into contractor work areas.
2. Monitor the contractor's compliance with the contract throughout the duration of the work. When checking contractor work during the project, note any negligent or unlawful act or condition in violation of safety standards or requirements. Any items noted should be brought immediately to the attention of the contractor's designated representative in writing with a copy of the notice being sent to the contractor's home office concurrently. However, if an unsafe act or a condition is noted that creates an imminent danger of serious injury, immediate steps should be taken with the contractor's employees to stop the unsafe act or condition. Do not allow work that is in violation of a regulation to continue.
3. Document all discussions, including place, time, and names of contractor employees in attendance.
4. Approve the contractor beginning work each day, unless it is routine service or maintenance work or periodic outdoor service or maintenance work.
5. For work for which MID has developed specific and generally applicable procedures, make sure contractors and their subcontractors follow the same procedure.
6. Do not allow loaning of tools and equipment to outside contractors and their subcontractors. The contractor is required to provide the necessary tools and equipment.
7. In the absence of on site contractor supervision, contact 911 in emergency situations where severity of the injury dictates immediate attention .
8. Obtain a copy of each CAL/OSHA recordable injury report from the contractor and subcontractor. Investigate and report to the project manager all personal injuries to contractor and subcontractor employees.
9. Investigate and report any property losses. Maintain a contractor accident report file.

After conclusion of the contract work, the project manager completes a post-project assessment of the contractor's safety performance to be used for future reference, with a recommendation on whether or not to re-hire the contractor.

Contractor Guidelines for Information Exchange

Before the Contract Work Begins, the Contractor Must:

1. Designate a representative to coordinate all safety and health issues and communicate with MID's designated representative.
2. Provide documentation of any necessary safety training, as described in the Training Requirements section of this policy, to MID's designated representative.
3. Sign a confidentiality statement to protect MID's proprietary data.

4. Provide information to the designated representative on the safety and health hazards that may arise during the course of the contractor's work at MID and the means necessary to avoid danger from those hazards, including Hazard Communication and all other potential hazards.
5. Obtain from MID any safety rules and regulation in effect at the site or potential hazards present that may affect the contractor's work.
6. Be certain to be informed of any emergency signals and procedures that may be put into operation in areas where the contractor's employees are working. The contractor should be certain to have the telephone numbers of the nearest hospital, ambulance service, and fire department.
7. Advise and train its employees on hazards associated with the work to be performed, including any Hazard Communication or other hazard information provided the contractor by MID's designated representative.
8. Keep the designated representative of MID fully informed of any work which may affect the safety of MID's employees or property. This includes complying with the state and federal right-to-know legislation and providing the designated representative appropriate material safety data sheets (MSDSs) or other required information about chemicals the contractor will bring onto the site.
9. Know who to call and what to do in emergencies, including where first-aid and medical services are located and train employees on this.

During the Contract Work, the Contractor Will:

1. Have a designated site safety coordinator present and attentive to the work being carried out at all times that the contractors and/or subcontractors are working at the facility site.
2. Ensure that all subcontractors are abiding by the terms of this plan.
3. Perform its work while the plant is operating, if necessary, and establish necessary safe practices to permit work under operating conditions without endangering this company's associates and property. This includes but is not limited to barricading, sign-posting, and fire watches.
4. Make sure that any equipment, chemicals, or procedures used by the contractor to perform contracted work meet all CAL/OSHA requirements.
5. Be held responsible and accountable for any losses or damages suffered by this company and/or its employees as a result of contractor negligence.
6. Provide its employees with medical care and first-aid treatment. MID first-aid facilities may be used only in case of emergencies.
7. Use only the plant or building entrance designated, and follow the facility access control practice. The contractor also will ensure that each contractor employee is issued and wears some form of easily seen identification.
8. Provide supervisors and employees who are competent and adequately trained, including training in all health and safety aspects of the work involved in the contract.
9. Provide all tools and equipment for the work, including personal protective equipment (PPE), and ensure the equipment is in proper working order and employees are instructed in its proper use.
10. Maintain good housekeeping in the workplace.

11. Follow specific instructions supplied by MID should emergency alarms be activated.
12. Notify the designated representative immediately of any CAL/OSHA recordable injury or illness to contractor employees or subcontractor employees occurring while on any MID site. Provide a copy of each accident report to the designated representative.
13. In the event there is a disagreement between MID and contractor as to safe practice, hazardous material or operation, MID will be the deciding entity.
14. Receive and use a copy of MID's safety policies and procedures, and the "Contractor Safety Handbook".

After conclusion of the contract work, the contractor is responsible for cleaning all work areas and disposing of any discarded materials in a proper and legal manner.

TRAINING REQUIREMENTS

MID Requirements

Merced Irrigation District makes sure that affected MID employees receive training on all hazards that will be introduced by a contractor.

In addition, we emphasize to the contractor that it is the contractor's responsibility to convey to its employees any safety information provided by MID to the contractor.

Contractor Requirements

The Contractor Must:

1. Train all workers on all safety and health hazards and provisions applicable to the type of work being done, and provide documentation of such training to MID's designated representative.
2. Train employees on where to obtain first-aid and medical services.
3. Train employees on MID's "Contractor Safety Handbook".

RECORDKEEPING REQUIREMENTS

MID Requirements

The Designated Representative Will:

1. Have a copy of the contract on file and be thoroughly familiar with its contents, and with the safety and health aspects of the work.
2. Keep records of all training done with MID workers regarding hazards to be caused by the contracting company.
3. Keep copies on file of all forms or statements related to the contract that are required by MID to be filled out before or during contract work.
4. Keep a CAL/OSHA recordable injury and illness log for the project, as well as copies of accident reports on all accidents that occur in the course of the project.

5. Keep a daily log regarding prework start-up inspection findings.
6. Keep records of all documentation of any sort given to you by the contractor, including records of training done, MSDSs accident reports, etc.
7. Keep records of all documentation of any sort you give to the contractor, including list of hazards to train their employees on MSDSs, etc.
8. Document all discussions, letters, memos, or other communications made to the contractor regarding safety issues, including place, time, and names, of people involved.

Contractor Requirements

The Contractor Will:

1. Keep records of all training done with contract workers and all documentation provided to the contracting company regarding such training.
2. Keep copies on file of all forms or statements related to the contract that are required by the MID to be filled out before or during contract work.
3. Have on file the telephone numbers of the nearest hospital, ambulance service, and fire department.
4. Have copies on-site of all material safety data sheets (MSDSs) or other required information about chemicals relevant to the work on-site.
5. Keep an OSHA recordable injury and illness log for the project, as well as copies of accident reports on all accidents that occur in the course of the project.

CONTACTS

Safety Section: (209)722-5761 or (209)777-5257 cell

Human Resources: (209)354-2082