

**Soldier Canyon Water Treatment Authority (SCWTA)**  
**Job Description**

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<b>Position Title:</b> WATER TREATMENT PLANT - MAINTENANCE MECHANIC I/II
<b>FLSA Status:</b> Non-Exempt/Hourly
<b>Reports To:</b> Maintenance Supervisor
<b>Salary Range:</b> \$53,000 to \$80,000 - Annually
<b>Revision Date:</b> November 2023

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**Summary**

Under general supervision of the Maintenance Supervisor, performs a variety of maintenance, repair, and construction tasks in the alteration, repair, and maintenance of the Soldier Canyon Filter Plant (SCFP) equipment, buildings, and structures. Duties and responsibilities include performing the daily work of the maintenance aspect of a complex 60 MGD water treatment facility, including maintenance of SCFP equipment, machinery and related facilities, coordination, collaboration with other operations personnel, as well as other duties directed by the Lead Maintenance Mechanic.

**Essential Job Functions**

The following duties and responsibilities are illustrative of the primary functions of this position and are not intended to be inclusive:

- Participates in the maintenance of the water treatment plant including the maintenance, repair, and installation of all electronic, electric, hydraulic, mechanical, chlorination systems, chemical feed & storage systems and pneumatic equipment, HVAC systems, VFDs, heavy vehicles and groundskeeping.
- Ensures the proper mechanical function of all plant unit processes including plant flow control, chemical feed systems, rapid and slow mixing devices, sedimentation facilities, filtration equipment, pumping and storage facilities, filter backwash and settled water waste, and sludge handling facilities.
- Responsible for all preventative-corrective maintenance within the SCFP and on the facility grounds.
- Coordinates with and informs plant operations on repair and maintenance of plant equipment.
- Controls and maintains mechanical and plumbing critical spare parts inventory.
- Helps to develop a preventative maintenance program and documents all maintenance activities.
- Conducts repairs and preventative maintenance on pumps, motors, compressors, and associated equipment.
- Safely operates all equipment.
- Supports the installation of new equipment in the SCFP.
- Performs general repair and maintenance of plant plumbing, buildings, and grounds.
- Performs general troubleshooting of mechanical equipment.
- Provides recommendations for treatment equipment replacement and purchases.
- Diagnosis of mechanical, pneumatic, and hydraulic equipment problems and repairs the equipment.
- Accurately records all exception maintenance activities in operations log.
- Operates and maintains all plant rolling stock (vehicles, heavy equipment, lawn equipment, etc.).
- Provides training to other plant personnel.
- Lawn mowing, weed control, ditch/drainage repairs, road maintenance.
- Orders parts and supplies with approval from Lead Maintenance Mechanic.
- Performs general housekeeping and painting on an ongoing basis.
- May perform electrical repairs on controls and equipment up to 480 volts.
- Implements Plant safety measures.
- Helps to develop and write Standard Operating Procedures for all routine and emergency maintenance procedures.

- Helps to develop and write maintenance work plans and work orders in a computerized maintenance management system (CMMS).
- Using computer equipment and CMMS, develops and maintains a logs of Plant maintenance, work performed, and unusual operating conditions.
- Communicates with the Lead Maintenance Mechanic to share knowledge of any ongoing and emerging Plant equipment issues.
- Conducts regular Plant inspections for safety, housekeeping, and equipment/process checks.
- Purchases required maintenance commodities and supplies, with the approval of the Lead Maintenance Mechanic.
- Understands all plant emergency response and security procedures.
- Builds and maintains positive working relationships with co-workers.
- Other duties as required and necessary to ensure the success of the organization.
- Provides emergency maintenance shift coverage if needed.
- Subject to 24-hour on call as necessary, including evenings, weekends, and holidays.

### **Job Knowledge, Skills, and Abilities**

- Working knowledge of conventional water treatment maintenance techniques for a 45-60 MGD water treatment plant.
- Operations, services, and activities of a comprehensive water treatment plant maintenance program.
- Equipment vendors and sources of spare parts and replacement equipment.
- Methods and techniques of troubleshooting, maintaining, repairing, and installing plant equipment.
- OSHA rules and regulations.
- Electrical codes and accepted practices.
- Methods and techniques of stick, carbon arc, mig, and tig welding.
- Methods and techniques of handling and transporting hazardous waste, chemicals, and gases.
- Ability to train other Maintenance Mechanics.
- Ability to develop constructive and cooperative working relationships with others and maintaining these relationships over time.
- Ability to handle conflicts by maintaining composure, keeping emotions in check, controlling anger, and avoiding aggressive behavior.
- Ability to prioritize, organize, and accomplish work in a timely manner.
- Ability to read and interpret drawings, equipment manuals, Safety Data Sheets, Standard Operating Procedures, Process Diagrams, and other technical information to perform all assigned tasks effectively and safely.
- Knowledge of the physical Plant and ability to maintain the Plant in case of power outages, PLC failures, etc.
- Ability to recognize and assess equipment problems and react with corrective actions.
- Knowledge of OSHA safety regulations and safety related to construction, repair, and maintenance work.
- Ability to recognize and assess maintenance problems and react with corrective actions.
- Ability to utilize necessary tools to perform repairs.
- Effectively communicate with all plant personnel regarding maintenance issues.
- Knowledge of principles and practices of painting, carpentry, building, and equipment maintenance.
- Perform arithmetic and mathematic calculations related to shop and field work.
- Adequate knowledge of Microsoft Windows, Word, and Excel to perform documentation tasks. Ability to type and use word processing, graphic, and spreadsheet computer programs; and operate software packages such as Antero CMMS.
- Ability to use phone and internet effectively for research and placing orders.
- Ability to follow oral and written instruction.
- Vision must be adequate to read computer screens and to perform job tasks safely.

### **Certificates, Licenses, Registrations**

- Requires a high school or vocational school degree or equivalent.
- Must possess and maintain a valid Colorado Driver's license.
- Willingness to respond to emergency situations and overtime requests.

### **Computer Skills**

To perform this job successfully, an individual should have knowledge of Internet software; Spreadsheet software; Word Processing software; computerized maintenance management systems (CMMS) - AllMax Antero software preferred; and Supervisory Control and Data Acquisition (SCADA) software, and associated applications.

### **Visual Acuity**

Near acuity and accommodation are required for reading written instructions, schematics, blueprints, precision measuring instruments, and computer screen.

### **Hearing Ability**

The ability to recognize adverse changes in process equipment.

### **Work Environment**

The work environment characteristics described here are representative of those an employee encounters while performing the essential functions of this job:

- While performing essential functions of this position, employee is regularly exposed to work near moving mechanical parts, work in highly precarious places, fumes, or airborne particles, toxic or caustic chemicals, outdoor weather conditions, and risk of electrical shock.
- The work environment characteristics described here are representative of those an employee encounters while performing the essential functions of this job:
- High noise levels from operation in Plant.
- Physical hazards from working in vicinity of high voltage, high pressure lines, chemical, elevated areas, and confined spaces.
- Cool, humid interior working conditions.
- Skin exposure to oils and chemicals.

Work is performed inside and outside of the water treatment Plant. Inside there is regular exposure to high equipment noise, toxic or caustic chemicals, fumes or airborne particles, and potential electrical and machinery hazards. Outside work requires exposure to high noise, un-even ground, heavy equipment, and adverse weather conditions. Fall hazards exist both inside and outside due to multiple elevations in and around facilities. Required to stand, walk, reach with hands and arms, climb, descend, balance, stoop, kneel, sit, crouch and crawl. Routinely lift, pull, and/or move up to 50 pounds. Reasonable accommodations may be made to enable individuals with disabilities to perform the essential functions.

While performing essential functions of this position, employee is occasionally exposed to wet or humid conditions, extreme cold, extreme heat, and work in potentially explosive environments. Working conditions can be occasionally loud. The employee is subject to call back during evenings and weekends, occasional overtime, and emergency repairs. The employee may be required to follow other job-related instructions and to perform other job-related duties as requested, subject to all applicable state and federal laws.