



## AWP Mechanical Technician

**Department:** AWP  
**FLSA Status:** Non-Exempt  
**Salary Grade:** 21 & 23

### SUMMARY DESCRIPTION

Incumbent performs scheduled and unscheduled maintenance, including repairs, modifications, and rebuilds to mechanical, pneumatic, and electro-mechanical equipment. Under general supervision, this position performs skilled repairs, preventive/corrective/predictive maintenance on equipment and related systems such as: pumps, blowers, centrifuges, conveyors, motors, valves, surge arresters, chemical feed systems, air compressors, and other equipment. Duties include: monitoring and regulating valves, pumping facilities, chemical feed and other related equipment; monitoring sewage lift stations and sewage collection systems; performing preventive maintenance, servicing and performing minor repairs on equipment; preparing and maintaining required documents and paperwork; optimizing operations to reduce energy expenditures; troubleshooting and repairing pump equipment and related systems; performing operational tests on motors, turbine and centrifugal pumps and various valves; evaluating the condition of related and auxiliary equipment and making recommendations for repairs; performs general fabrication and welding; and performing minor electrical work.

### ESSENTIAL DUTIES

1. Repairs, maintains, installs, inspects, troubleshoots, and adjusts a variety of mechanical equipment at treatment facilities. Equipment includes: pumps, blowers, centrifuges, compressors, scrapers, hydraulic controls, rotary drum thickeners, HVAC systems, collectors, boiler systems, grit handling systems, gear boxes, belt, chain and screw conveyors; and related equipment.
2. Performs mechanical maintenance, repairs, and rebuilding of shop, field and plant equipment used wastewater and advanced water treatment plants, pump stations, and collection systems. Maintains, installs, inspects, and repairs a variety of pumps, such as centrifugal, positive displacement, and screw; services, lubricates, and maintains chemical feed and processing equipment; determines excess wear and pump efficiencies' follows preventative, corrective, and predictive maintenance practices.
3. Performs skilled repairs and preventive maintenance on pump equipment and related systems and appurtenances. Repairs and maintains pump equipment, motors, pressure reducing stations, monitors long term performance of pumps and motors.
4. Maintains, installs, inspects, and repairs piping systems of PVC, black and cast iron, stainless steel and copper tubing; installs, removes and repairs larger pipes and valves; modifies existing

pipng systems and welded steel pipe, such as nozzles and saddles; and taps, cuts and threads pipes.

5. Performs regularly scheduled maintenance, inspection, and repair tasks on mechanical devices; conducts overhauls on plant equipment; and performs close tolerance checking and testing.
6. Uses hand and power tools such as grinders, saws, jacks, welders, hydraulic presses and pullers, pipe threaders, inspects, tests and measures equipment and material using precision instruments such as scales, height and depth gauges, calipers, and micrometers of various types.
7. Uses personal computer to perform computerized maintenance management tasks and specialized functions as directed.
8. Prepares and paints plant equipment, pipes, tanks and structures.
9. Performs general housekeeping tasks and building maintenance within the plant.
10. Plans tasks, keeps records of work performed, and provides estimates of labor and material necessary for the performance of the work. Conducts research on asset repair/replacement prices and supplies as directed.
11. Performs operational tests on motors, valves and pump stations to determine the condition of equipment and, based on test data, makes recommendations.
12. Plans, coordinates, constructs/installs small and large pumps, motors, valves, and appurtenance. Maintains spare parts inventory and use.
13. Coordinates with supervisor, Planner and CMMS specialist to perform and document work daily.
14. Performs other duties of a similar nature or level.

**Knowledge Required:**

1. Materials, methods, practices and equipment used in mechanical maintenance and repair work.
2. Principles of record keeping.
3. Operational characteristics of specialized maintenance and repair equipment.
4. Materials, methods, practices, and equipment used in the maintenance and repair of wastewater treatment facilities and equipment.
5. Hydraulics.
6. Understands job related Water Quality parameters;
7. Valves and metering apparatus.
8. Pumps and related systems.
9. Automatic control valves, gates, actuators, and solenoids.
10. Centrifuges, blowers, conveyors and other equipment used in water and wastewater treatment and conveyance facilities.

**Skills Required:**

1. Ability to operate, maintain and repair a wide variety of equipment and tools used in wastewater treatment and pump station operation.
2. Read, interpret, and apply technical information from manuals, drawings, specifications, layouts, blueprints, and schematics.
3. Ability prepare and maintain accurate and complete records.
4. Resolving problems;
5. Organizational skills;
6. Monitors equipment operation;
7. Maintains and troubleshoots problems with pumps, motors and related systems;
8. Uses computers and related software applications;

9. Communication, interpersonal skills as applied to interaction with coworkers, supervisor, the general public, etc. sufficient to exchange or convey information and to receive work direction.

**Training/Experience Required:**

1. Two years of experience in the maintenance, repair, and service of industrial mechanical equipment which clearly demonstrates possession of the knowledge and skills listed above or
2. Two years' experience in installing and repairing pumps, motors and related systems.
3. Specialized coursework in compressor and pump operation and maintenance desired.
4. Experience with a CMMS, operating a forklift, confined space entry procedures, Lockout/Tagout procedures and NFPA 70 procedures preferred but not required.

**Licensing Requirements:**

1. Valid California Driver's License.
2. Grade 1 or higher California Water Environment Association (CWEA) Mechanical Technologist Certification and a Division of Drinking Water Treatment Operator T-1 is required within 12 months or two-test cycles from date of hire.

**Safety Priorities:**

1. Knowledge of general and field safety, proper reporting of safety violations, accidents and injuries.
2. Completes required and assigned safety and training assignments in a timely manner.
3. Understands proper lifting techniques.
4. Follows proper safety practices related to storing, handling, and transporting gases.
5. Uses correct lockout and tagout procedures.
6. Has the ability to work in a safe and efficient manner.

**Physical Requirements:**

1. Positions in this class frequently require: stooping, kneeling, crouching, crawling, reaching, sitting, walking, lifting, keyboarding, grasping, feeling, talking, hearing, seeing and repetitive motions.
2. Incumbents may be subjected to moving mechanical parts, electrical currents, extreme temperatures and will work with and around raw wastewater.
3. Heavy Work: Exerting in excess of 100 pounds of force occasionally, and/or in excess of 50 pounds of force frequently, and/or in excess of 20 pounds of force constantly to move objects
4. Occasional work in confined space areas.

**Classification History:**

Date: New 11/22