

## ENCINA WASTEWATER AUTHORITY

**DATE:** August 2022  
**POSITION TITLE:** Mechanical Technician I  
**DEPARTMENT:** Technical Services  
**REPORTS TO:** Mechanical Technician Supervisor  
**FLSA STATUS:** Non-exempt

**POSITION SUMMARY:** Under general supervision of the Mechanical Technician Supervisor, this position: performs scheduled and unscheduled maintenance, including repairs, modifications, and rebuilds to mechanical, pneumatic, and electro-mechanical equipment; and performs other related duties as assigned.

**SUPERVISORY DIMENSIONS:** This position exercises no direct supervision of staff. The incumbent of this position may provide training and guidance to the Mechanical Technician-in-Training position.

### **ESSENTIAL JOB DUTIES:**

The duties listed below are intended only as illustrations of the various types of work that may be performed.

- Promotes the Authority's Mission, Vision, and Values.
- As directed, repairs, maintains, installs, inspects, troubleshoots, and adjusts a variety of mechanical equipment at treatment facilities. Equipment includes pumps, blowers, compressors, scrapers; hydraulic controls; belt presses, HVAC systems, collectors, gear boxes, belt, chain, and screw conveyors; diesel engines and related co-generation equipment.
- From work orders, drawings, specifications, schematics, sketches, and verbal instructions, performs mechanical maintenance, repairs, and rebuilding of shop, field, and plant equipment used in wastewater 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 adjusts chemical feed and processing equipment; determines excess wear and pump efficiencies; and follows preventive and predictive maintenance practices.
- 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 piping systems and welded steel pipe, such as nozzles and saddles; and taps, cuts, and threads pipes.
- Performs basic to complex maintenance and repair tasks on a wide variety of internal combustion engines; adjusts valves and carburetors; and repairs and maintains exhaust systems.
- Performs regularly scheduled maintenance, inspection, and repair tasks on mechanical devices; conducts overhauls on plant equipment; and performs close tolerance checking and testing.
- Performs basic to complex maintenance, inspection, and repair tasks on drive components, such as repairing right angle drive gears and overhauling reduction drives, vari-drives, and belt and chain drives.

- Overhauls, maintains, installs, adjusts, inspects, and repairs a variety of hydraulic controls, compressors, and pneumatic tools.
- Uses hand and power tools such as grinders, saws, jacks, hydraulic presses and pullers, and pipe threaders, inspects, tests, and measures equipment and material using precision instruments such as scales, height and depth gauges, calipers, verniers, and micrometers of various types.
- 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.
- Responds to and resolves complex work related or equipment operating problems and ensures adherence to all safe work practices and procedures.
- Interface with Operations department to facilitate preventative maintenance and/or corrective work orders, emergency response, and other coordinated departmental services as needed. Advise, assist, support, and interact with other Authority departments and divisions as appropriate.
- Provides technical knowledge, equipment documentation, and labor to assist with contractor efforts.
- Assists in the preparation of department budgets, maintaining service records, preparing reports, making technical recommendations, and resolving action items as directed.
- Uses personal computer to perform CMMS management tasks, and specialized functions as directed.
- Follows proper safety practices, precautions, and procedures, such as storing, handling, and transporting gases, using correct lockout and tagout procedures, using flash protection when welding, and assisting in using safe rigging and welding practices.
- Originate purchase order requisitions within the framework of the Authority's purchasing policy.
- Prepares and paints plant equipment, pipes, tanks, and structures.
- Performs general housekeeping tasks and building maintenance at Authority operated facilities.
- Operate Authority vehicles in accordance with the EWA Vehicle Use Policy.
- Operate forklifts, utility carts, scissor lifts, aerial lifts, dump trucks, semi-tractors with trailers and other such equipment within Authority operated facilities.
- Interface with the public, contractors, consultants, member agencies, and vendors.
- Respond to emergencies at Authority operated facilities.
- Performs administrative tasks for the organization as needed.
- Performs other related duties as assigned.

Specific types of knowledge, skills and physical abilities required for these duties:

- Knowledge of the safe and proper operation of various types of hand and power tools, gas and electric cutting and welding equipment, precision measuring devices, test meters and gauges.
- Knowledge of the methods of operating, troubleshooting, diagnosing, repairing, and rebuilding industrial equipment.

- Knowledge of safe shop practices and ability to safely operate machine shop equipment, hand and power tools, as well as the support equipment used in wastewater facility mechanical maintenance.
- Ability to read, interpret and follow blueprints, specifications, manufacturers O&M manuals, contract drawings, equipment troubleshooting guides, illustrated parts breakdowns, assembly instructions, oil analysis, and calibration instructions.
- Ability to investigate and compile information and present it in an organized written form.
- Basic skills in reading, writing, and arithmetic; effective verbal communication skills.
- Ability to establish and maintain cooperative working relationships.
- Ability to operate forklifts, skip loaders, cranes, and boom trucks.
- Ability to respond to 24-hour call-ins; work varying hours, weekends, holidays and days off; and perform stand-by duty as needed.
- Ability to withstand exposure to varying weather conditions, work in wet and/or odorous areas, and work in confined areas, tanks, or structures.
- Ability to withstand strenuous physical activities for extended periods of time including lifting, bending, carrying, crawling, and climbing.
- Ability to communicate effectively with those contacted in the course of work ensuring that courteous and professional customer service is provided.

**EDUCATION REQUIREMENT:** Graduation from High School or equivalent. Specialized course work in compressor systems, hydraulic theory, drive systems, or pump operation and maintenance is desired but not required.

**EXPERIENCE REQUIREMENT:** One (1) year of progressively responsible experience in the maintenance, repair, rebuild and service of equipment found in the wastewater industry.

**LICENSE REQUIREMENT:** Possession of a valid California Class C Driver's License and the ability to be insured under the Authority's automobile insurance coverage. Note: Failure to maintain a valid California Driver's License constitutes possible cause for termination.

**CERTIFICATION REQUIREMENT:** Possession of a valid Grade I or higher California Water Environment Association (CWEA) Mechanical Technologist Certification, or the ability to obtain one within 12 months of hire, and maintenance of the certification in an active status. Successfully complete EWA's Mechanical Technician I Performance Qualification Standards (PQS) booklet and exam within 12 months of appointment to this position.

**PROMOTIONAL OPPORTUNITIES:** A promotion to Mechanical Technician II will be made after Mechanical Technician I: (a) possesses a Grade II or higher CWEA Mechanical Technologist certification; (b) successfully completes two (2) years of progressively responsible experience in the maintenance, repair, rebuild and service of wastewater equipment; and (c) has successfully completed EWA's Mechanical Technician I PQS booklet and exam.

**PHYSICAL AND MENTAL DEMANDS:**

**Physical Demands**

While performing the duties of this position, the employee is regularly required to walk; talk or hear by telephone and in person; sit; smell; use hands to finger, handle, feel or operate objects, tools, or controls; reach and lift with hands or arms. The employee is frequently required to stand, stoop, and kneel for prolonged periods of time.

Specific vision abilities required by this job include close vision, distance vision, the ability to distinguish colors and shades, depth perception, and the ability to adjust focus. The employee must regularly lift and move up to 50 pounds.

#### **Mental Demands**

While performing the duties of this position, employees are regularly required to use oral and written communication skills, read documents or instructions; analyze and solve problems; observe and interpret data or information; use mathematical reasoning; learn and apply new information or skills; perform detailed work; work under changing, intensive deadlines with constant interruptions; and perform multiple concurrent tasks.

**WORK ENVIRONMENT:** While performing the duties of the job, the employee may be exposed to toxic or hazardous chemicals. The noise level in the work environment is quiet to loud. Hearing protection is required in some work areas.

**RESPIRATORY PROTECTION POLICY/PROGRAM REQUIREMENT:** This position must comply with the Authority's Respiratory Protection Policy & Procedures, which requires the use of respirators when conducting specific tasks.

**ADDITIONAL QUALIFICATIONS:** Possession of a good driving record and the ability to be insured by the Authority's insurance carrier; and the ability to read, write, speak and comprehend English.

**RIGHT TO WORK REQUIREMENT:** Documentation of eligibility to work in U.S. will be required as a condition of employment.

**The Encina Wastewater Authority does not discriminate against any applicant for employment on the basis of age, race, color, sex, ancestry, national origin, pregnancy, marital status, sexual orientation, sexual identity, religion, military status, medical condition, mental disability, and physical disability.**

**The list of essential job duties contained in this job description is not exhaustive and may be supplemented as necessary. This position performs other related duties as assigned, some of which may become essential to the position.**

**Any offer of employment for this position is contingent upon receipt of acceptable results from a background investigation, physical examination, and a drug screen.**