

## ENCINA WASTEWATER AUTHORITY

**DATE:** November 2018 (Revised)  
**CLASSIFICATION:** Mechanical Technician  
**POSITION TITLE:** Mechanical Technician I  
**DEPARTMENT:** General Services  
**REPORTS TO:** Maintenance Manager  
**FLSA STATUS:** Nonexempt

**POSITION SUMMARY:** Under general supervision of the Maintenance Manager, this position requires the skill level of a Mechanical Technician and performs tasks that are more complex which require a higher skill level than an entry level position. Position performs scheduled and unscheduled maintenance, including repairs, modifications, and rebuilds to mechanical, pneumatic, and electro-mechanical equipment; serves as a Biosolids Environmental Management System (EMS) team member; performs other related duties as assigned.

**SUPERVISORY DIMENSIONS:** None

### **ESSENTIAL JOB DUTIES:**

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

- Practices and promotes the Authority's Mission, Vision and Values.
- 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 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.
- Uses personal computer to perform computerized maintenance 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.
- Prepares and paints plant equipment, pipes, tanks and structures.
- Performs general housekeeping tasks and building maintenance within the plant.
- Performs Biosolids Environmental Management System tasks within the plant as required.
- Drives Authority vehicles, operates forklifts, utility carts, dump trucks, semi-tractors with trailers and other such equipment within the plant compound.
- Performs other related duties as assigned.

To perform this job successfully, an individual must be able to perform each essential duty satisfactorily. Reasonable accommodations will be made to enable qualified individuals with disabilities to perform the essential functions.

Specific Types Of Knowledge, Skills And Physical Abilities Required:

Knowledge of:

- Materials, methods, practices, and equipment used in mechanical maintenance and repair work.
- Principles of record keeping.
- Principles of shop math applicable to machine repair and metal fabrication.
- Operational characteristics of specialized maintenance and repair equipment.
- Materials, methods, practices, and equipment used in the maintenance and repair of wastewater treatment facilities and equipment.
- Occupational hazards and standard safety precautions necessary in maintenance and repair work.
- Application of pertinent Federal, State, and local laws, codes, and regulations.
- Materials, methods, practices and equipment used in the maintenance and repair of wastewater treatment facilities and equipment.
- Operational characteristics of specialized maintenance and repair equipment.

- Occupational hazards and standard safety precautions necessary in maintenance and repair work.
- Pertinent Federal, State, and local laws, codes, and regulations.

Ability to:

- Operate a variety of motorized vehicles safely and knowledge of safe driving principles and practices.
- Operate, maintain and repair a wide variety of equipment and tools used in wastewater treatment plant and pump station operation in a safe and effective manner.
- Perform manual labor for extended periods of time in all types of weather.
- Read, interpret, and apply technical information from manuals, drawings, specifications, layouts, blueprints, and schematics.
- Understand and follow oral and written instructions.
- Prepare and maintain accurate and complete records.
- Perform accurate shop mathematics.
- Communicate clearly and concisely, both orally and in writing.
- Establish, maintain, and foster positive and harmonious working relationships with those contacted in the course of work.
- Operate, maintain and repair a wide variety of equipment and tools used in wastewater treatment plant and pump station operation in a safe and effective manner.
- Perform skilled maintenance and repair work on wastewater pump stations and treatment facilities and equipment with accuracy, speed, and minimal supervision.
- Perform skilled maintenance and repair work on recycled water treatment, storage, and distribution systems and equipment with accuracy, speed, and minimal supervision.
- Read, interpret and apply technical information from manuals, drawings, specifications, layouts, blueprints, and schematics.

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

**EXPERIENCE REQUIREMENT:** A minimum of three years of experience in the maintenance, repair, and service of industrial mechanical equipment, internal combustion engines and related equipment which clearly demonstrates possession of the knowledge and skills listed above.

**LICENSE REQUIREMENT:** Possession of a valid California Class C Driver's License, ability to be insured under the Authority's automobile insurance coverage, and ability to provide evidence of current personal automobile liability coverage.

Note: Failure to maintain a valid California Driver's License constitutes possible cause for termination.

**CERTIFICATION REQUIREMENT:** A Grade I or higher California Water Environment Association (CWEA) Mechanical Technologist Certification is required within 12 months of hire date. Must also have successfully completed the Mechanical Technician I Performance Qualification Standards (PQS) booklet and exam. (An external candidate must complete PQS within 12 months of hire.)

**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 is frequently 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/Program and Operating Procedures for Air-Purifying Respirators.

**QUALIFICATIONS:** Ability to pass Authority pre-employment physical examination, for example respiratory protection, hearing and other protection testing as applicable; ability to pass drug screening exam; possession of a good driving record and ability to be insured by Authority's insurance carrier; and the ability to read, write, speak and comprehend English.

**RIGHT TO WORK REQUIREMENT:** Must be a United States citizen or possess qualified alien status. 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 and a drug screen.**