

## ELECTRICAL/MECHANICAL TECHNICIAN 2

Job Code	Pay Grade
17234	CL15

### **Nature of Work**

This position is responsible for performing a variety of tasks at the full performance level plus designated lead worker assignments. Work specializes in the installation, modification, fabrication, repair, and maintenance of Utilities Division electrical and/or heavy mechanical equipment and systems. Work may utilize knowledge in electrical, plumbing, welding, or other trades to locate and correct system malfunctions and ensure improvements, as well as to maintain county properties, facilities, equipment, and lines or devices in public utilities systems; electrical and mechanical equipment used in production treatment and transmission of potable water and wastewater and distribution of reclaimed water. Tasks often require manipulative ability, utilizing job-acquired skills in specialized fields; traffic control involving the design, placement and maintenance of traffic safety devices utilized under extremely heavy traffic and during inclement weather. Incumbents may be required to work in different but specific assigned areas from project to project, as business needs and skills match. Additionally, the wide variety of equipment utilized is more complex and specialized, requiring adaptability and ability to work independently. The incumbent is supervised by a manager, plant operations supervisor or designee.

### **Minimum Qualification Requirements**

- Completion of a 2 year technical or vocational program in mechanical skilled or electrical trades or directly related field 1 year of journeyman experience in the maintenance and repair of heavy mechanical equipment and machinery; or
- 3 years directly related experience as described above; or
- An equivalent combination of education, training and/or experience.

### **Appointing Authority May Also Require**

- Florida Driver's License or Florida Commercial Driver's License and endorsement, within 6 months of hire, if any.
- Assignment to work a variety of work schedules including compulsory work periods in special, emergency, and/or disaster situations.
- Employee to acquire and maintain certification in designated areas according to area of assignment.
- Other highly desirable knowledge, skills, abilities, and credentials relevant to a position.

### **Illustrative Tasks (These are examples and are not all inclusive.)**

- Acts in a lead worker capacity for utilities mechanics in the installation, maintenance, modification and repair of a variety of heavy mechanical machinery, equipment and systems used in water or wastewater treatment plants, buildings and related facilities.
- Checks equipment efficiency and performs preventive maintenance service on electrical and mechanical components of a variety of machinery, pumps and supportive equipment.
- Disconnects and reconnects electric motors as necessary for repair or replacement; may install electric wiring, conduit and circuitry, makes repairs to switch gear equipment and performs other related electrical tasks.
- Detects causes of electrical failures; analyzes, interprets and ensures compliance with established codes; calculates data necessary for wiring instrument systems; requisitions supplies and materials needed to complete task.
- Trains new subordinate technical personnel.
- Performs fabrication and welding to affect required repairs and enhancements.
- Repairs and adjusts mechanical systems for vehicular equipment, hydraulic pump systems; performs structural repairs on large cranes, pressure trucks and backhoes.
- Installs and reroutes pipes at water and wastewater treatment facilities, pumping stations and water distribution stations.

## ELECTRICAL/MECHANICAL TECHNICIAN 2 (continued)

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### Illustrative Tasks (continued)

- Installs, maintains and repairs chlorination systems equipment, chemical feed pumps and metering equipment.
- Inspects physical plants, equipment, buildings and related facilities to determine operating conditions and needed repairs and modifications; performs preventive maintenance work.
- Maintains records of services and maintenance.
- Performs related work as assigned or required.

### Knowledge, Skills, and Abilities

- Knowledge of electrical, plumbing, welding and possibly other trades' principles and practices.
- Knowledge of potable water production and wastewater treatment processes.
- Knowledge of installation, operation, modification, fabrication, repair and maintenance of electrical and/or heavy mechanical equipment used in water plant and/or wastewater plant operations.
- Knowledge of types of potable water and wastewater handling equipment (motors, valves, pumps, electronic sensors).
- Knowledge in controlling the production and distribution of potable water or collection of wastewater.
- Skill in using standard building trades tools and devices.
- Ability to lead, coordinate and guide the work of assigned teams.
- Ability to read and interpret engineering plans and diagrams, as well as write a wide variety of work orders and administratively related reports.
- Ability to troubleshoot electrical and mechanical equipment malfunctions to repair or adjust equipment to maintain desired operations.
- Ability to perform a combination of skilled trades' tasks such as electrical, plumbing, mechanical, welding and other knowledge required to maintain, repair, replace and improve potable water and wastewater operations.
- Ability to adjust and regulate a variety of automatic or manually controlled auxiliary equipment to ensure safe operations.
- Ability to anticipate and adjust systems due to changing factor, water quality, weather, and other factors.
- Ability to handle traffic control in congested areas.
- Ability to understand and follow oral and written instructions.
- Ability to use computers in daily activities.

For official use only

Revised	EEOC Code	Overtime Code
7/10	Technicians	Classified