



Electrical/Mechanical Technician 3

Category: Classified
Pay Grade: C26
Job Code: 17236

To perform this job successfully, an individual must be able to perform the essential job functions satisfactorily. Reasonable accommodations may be made to enable individuals with disabilities to perform the primary job functions herein described. Since every duty associated with this position may not be described herein, employees may be required to perform duties not specifically spelled out in the job description, but which may be reasonably considered to be incidental in the performing of their duties just as though they were actually written out in this job description.

JOB SUMMARY

Performs complex advanced electrical/mechanical work ; specializes in the installation, modification, fabrication, repair, and maintenance of electrical and/or heavy mechanical equipment and systems; utilizes knowledge in various trades such as electrical, plumbing, welding, and other skills, to locate and correct malfunctions and for improvement of heavy industrial pumping systems and facilities; specializes in operation, monitoring, maintenance, and/or repair of 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, wastewater, and distribution of reclaimed water as they relate to utilities projects, operation of light to medium equipment for utilities construction and maintenance projects.

ESSENTIAL JOB FUNCTIONS (examples, not all inclusive)

- Manages or supervises all plant and equipment repair and maintenance activities performed on electrical, chemical, and mechanical equipment at all pump stations, lift stations, wastewater treatment plants, water treatment plants and reclaimed water facilities, or other designated utilities service areas;
- Performs electrical, mechanical, hydraulic work as needed;
- Develops, improves, implements, and maintains section's Preventive Maintenance Program;
- Schedules maintenance and repair activities, estimates costs, and submits cost/benefit analyses for a designated utilities service area;
- Monitors and forecasts all maintenance and repair activities for a designated utilities service area;
- Utilizes complex and comprehensive work management systems for project tracking;
- Trains and supervises subordinate staff and carries out staff meetings;
- Maintains records and communicates effectively, orally and in writing;
- Performs other related job duties as assigned.

QUALIFICATIONS

Education and Experience:

High school graduate and five (5) years of journeyman experience in the maintenance and repair of heavy mechanical equipment and machinery, and electrical repair and maintenance of equipment used in water or wastewater treatment plants, and one (1) year of supervisory experience or training; or an equivalent combination of education, training, and/or experience.

Special Qualifications (May be required depending on area of assignment):

- Florida Driver's License or Florida Commercial Driver's License and endorsement, 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 knowledge, skills, abilities, and credentials required for a specific position.

Knowledge, Skills and Abilities:

- Knowledge of the functions and servicing of water and/or wastewater treatment plants, electrical, chemical, and mechanical equipment;
- Knowledge of types of potable water and wastewater handling equipment (motors, valves, pumps, electronic sensors, and related support equipment);
- Knowledge of how to repair and operate electric monitoring equipment, pumps, chemical feeds, and related equipment;
- Knowledge of principles and practices of electrical, plumbing, welding, and possibly other trades;
- Skill in using standard building trades tools and devices;
- Ability to plan, manage, and supervise an entire plant location operation with subordinate teams and ongoing projects related to potable water and/or wastewater treatment systems maintenance, repairs, and operations;
- Ability to manage, assign, supervise, and evaluate the work of assigned personnel, budget, short term/long term scheduling, and administrative systems;
- Ability to establish and maintain effective working relationships with others;
- Ability to troubleshoot electronic and mechanical equipment malfunctions to repair or adjust equipment to maintain desired operations;
- Ability to perform technical computations, analyze data, and prepare and submit reports based on findings;
- Ability to perform a combination of skilled trades' tasks such as electrical, plumbing, mechanical, welding, and other knowledge required to maintain, repair, 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 equipment due to changing factors, such as water quality, weather, and changing work conditions;
- Ability to repair and replace electrical controls, filters, pumps, valves, generators, mixers, filling machines, and equipment used in monitoring and handling potable water and wastewater processes and operations;
- Ability to effectively use computers in daily activities;
- Ability to use or repair small, medium, and heavy equipment and machinery.

PHYSICAL/MENTAL DEMANDS

The work is heavy work which requires exerting up to 100 pounds of force occasionally, and/or up to 50 pounds of force frequently, and/or up to 20 pounds of force constantly to move objects. Additionally, the following physical abilities are required:

- **Balancing:** Maintaining body equilibrium to prevent falling while walking, standing or crouching on narrow, slippery, or erratically moving surfaces. The amount of balancing exceeds that needed for ordinary locomotion and maintenance of body equilibrium.
- **Climbing:** Ascending or descending ladders, stairs, scaffolding, ramps, poles and the like, using feet and legs and/or hands and arms. Body agility is emphasized.
- **Crawling:** Moving about on hands and knees or hands and feet.
- **Crouching:** Bending the body downward and forward by bending leg and spine.
- **Feeling:** Perceiving attributes of objects, such as size, shape, temperature or texture by touching with skin, particularly that of fingertips.
- **Fingering:** Picking, pinching, typing, or otherwise working, primarily with fingers rather than with the whole hand as in handling.
- **Grasping:** Applying pressure to an object with the fingers and palm.
- **Handling:** Picking, holding, or otherwise working, primarily with the whole hand.
- **Kneeling:** Bending legs at knee to come to a rest on knee or knees.
- **Lifting:** Raising objects from a lower to a higher position or moving objects horizontally from position to position. Occurs to a considerable degree and requires substantial use of upper extremities and back muscles.
- **Pulling:** Using upper extremities to exert force in order to draw, haul or tug objects in a sustained motion.
- **Pushing:** Using upper extremities to press against something with steady force in order to thrust forward, downward or outward.
- **Reaching:** Extending hand(s) and arm(s) in any direction.

- Visual ability: Sufficient to effectively operate office equipment including copier, computer, etc.; and to read and write reports, correspondence, instructions, etc.
- Hearing ability: Sufficient to hold a conversation with other individuals both in person and over a telephone; and to hear recording on transcription device.
- Speaking ability: Sufficient to communicate effectively with other individuals in person and over a telephone.
- Mental Acuity: Ability to make rational decisions through sound logic and deductive processes.
- Talking: Expressing or exchanging ideas by means of the spoken word including those activities in which they must convey detailed or important spoken instructions to other workers accurately, loudly, or quickly.
- Repetitive Motion: Substantial movements (motions) of the wrist, hands, and/or fingers.
- Standing: Particularly for sustained periods of time.
- Stooping: Bending body downward and forward by bending spine at the waist. Occurs to a considerable degree and requires full motion of the lower extremities and back muscles.
- Walking: Moving about on foot to accomplish tasks, particularly for long distances or moving from one work site to another.

WORKING CONDITIONS

Work is performed in a dynamic environment that requires sensitivity to change and responsiveness to changing goals, priorities, and needs.