



Electronic Equipment Technician 2

Category: Classified
Pay Grade: C23
Job Code: 17246

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 and advanced level work performing as an electronic equipment technician. Work specializes in the installation, repair, and maintenance of electronic instrumentation and control for: county properties, facilities, equipment and lines or devices in public utilities or transportation control systems, electronic equipment used in production treatment and transmission of potable water, wastewater and distribution of reclaimed water, electronic equipment used in control of traffic signals, and Intelligent Transportation System (ITS) devices. Position operates light to heavy equipment within operation divisions, often requiring manipulative ability as well as utilizing job-acquired skills in specialized fields.

ESSENTIAL JOB FUNCTIONS (examples, not all inclusive)

- Performs installation, maintenance, modification, calibration, and repair of electronic and electrical instrumentation, equipment, and control systems;
- Exercises lead responsibility over others on project basis or as assigned;
- Detects causes of electronic and electrical failures, interprets and ensures compliance with established codes, calculates data necessary for wiring instrument systems, and requisitions supplies and materials needed to complete tasks;
- Troubleshoots, repairs, and programs new ITS equipment such as fiber and wireless IP based communications equipment, various vehicle detection systems, and dynamic message boards;
- Trains lower level technicians and staff in all phases of a variety of electronic and electrical instrumentation, equipment, and control systems;
- Assists subcontractors on the startup of new installations or sublet equipment repair or upgrade;
- Reviews proposed plans for new projects from engineers or contractors;
- Provides technical advice and assistance and acts in a lead worker capacity;
- Inspects instrumentation and equipment to determine operating conditions and needed repairs and/or modifications;
- Performs bench work repairs and overhauls and rebuilds complex electronic or electrical equipment;
- Performs emergency and routine field servicing of complex equipment and performs tests on parts, modules, or assemblies;
- Prepares purchase orders to obtain parts for repairing equipment and arranges for repairs beyond the scope of county facilities;
- Assists with operation and maintenance of lift stations;
- May have some responsibility for electronic traffic control and equipment for the design, placement and maintenance of traffic control devices utilized under extremely heavy traffic and during inclement weather;
- Performs basic recordkeeping;
- Operates automotive and heavy equipment;
- Performs preventive maintenance to water and wastewater treatment equipment;
- Files work orders and paperwork;

- Maintains and calibrates magnetic, turbine, mass flow meters, dissolved oxygen, PH, oxidation reduction potential analyzers, turbidity analyzers, gas detectors, chlorinators, sulfonators, etc.;
- Performs maintenance in the office, test bench, inventory room, and vehicles;
- Performs other related job duties as assigned.

QUALIFICATIONS

Education and Experience:

High school graduate and completion of a two-year certification program and one (1) year of directly related vocational or technical training, or three (3) years of highly automated computer-based electronics instrumentation installation, maintenance, and repair experience; 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.
- Candidate to demonstrate more advanced proficiency, competency, and satisfactory completion of regularly assigned work in an independent manner. Appointing Authority retains discretion to employ an incumbent at this level or advance the incumbent non-competitively or competitively, after a candidate meets the minimum qualifications to an in-line career ladder position within the same organization or department.
- 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 principles, procedures, and practices of electronic and electrical repair work;
- Knowledge of complex installation, modification, fabrication, repair, and maintenance of electronic and/or electrical 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 for controlling the production and distribution of potable water or wastewater treatment processes;
- Knowledge of methods, practices, techniques, materials, tools, and equipment pertinent to installation, maintenance, and repair of electronic traffic signal equipment;
- Knowledge of the principles, practices, methods, materials, equipment, and tools used in the construction of traffic signal control intersections and installation of traffic signals, control equipment, electrical lines, and interconnect systems.
- Ability to train and lead teams in potable water and/or wastewater treatment systems maintenance and repairs;
- Ability to interpret engineering plans and diagrams, as well as write a wide variety of work orders and administratively related reports;
- Ability to independently maintain, troubleshoot, and repair complex electronic equipment and control systems used in utilities operations such as pumps, SCADA, or similar radio/telemetry devices, control panels, generators, transfer equipment, switch gear systems, and similar apparatus;
- Ability to perform a combination of skilled trades tasks including those in fields of electrical, plumbing, mechanical, welding, and other trades 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 or systems to ensure safe operations;
- Ability to anticipate and adjust systems due to changing factors, e.g., water quality, weather, and other factors;
- Ability to repair and replace electronics controls, filters, pumps, valves, generators, mixers, filling machines, and equipment used in monitoring and handling potable water and wastewater processes and operations;

- Ability to understand and follow oral and/or written instructions;
- Ability to establish and maintain effective working relationships with managers, supervisors, employees, and others;
- Ability to use computers in daily activities;
- Ability to use or repair small, medium, and heavy equipment or machinery.

PHYSICAL/MENTAL DEMANDS

The work is medium work which requires exerting up to 50 pounds of force occasionally, and/or up to 30 pounds of force frequently, and/or up to 10 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 an environment where errors can lead to significant physical or mental consequences for self or others.