



Electrician Technical Services Department



Full-Time/Non-Exempt
Career Range: \$28.19/hr - \$41.36/hr
Hiring Range: \$28.19/hr - \$34.78/hr

Fort Collins-Loveland Water District

South Fort Collins Sanitation District

Revision Date: October 8, 2021

Approved by General Manager: 

Approved by Human Resources: 

General Purpose:

The Electrician provides highly skilled electrical work in the installation, testing, repairing, and maintaining of the Fort Collins – Loveland Water District and South Fort Collins Sanitation District (collectively “the Districts”) operational assets, the SFCSD Water Reclamation Facility (the facility) including Electrical Distribution Systems, Process Control Systems and Instrumentation, and General Building Electrical Maintenance for buildings owned by the Districts. This position reports directly to the Technical Services Superintendent.

Essential Functions:

- Installs, calibrates, tests, troubleshoots, repairs and maintains electrical systems, equipment, and components including, but not limited to local and remote terminal units, PLC’s and remote telemetry units (RTU’s), as well as variable frequency drives (VFD’s), control circuits, monitoring and control devices for motor controls process controllers, level controllers, level and pressure transducers, flow and position transmitters, chlorine/pH analyzers, data communications equipment, uninterruptible power supply (UPS) systems, cathodic protection systems, wireless and radio systems, security equipment.
- Works with Operations, Collections and Plant personnel to troubleshoot and resolve problems with all electrical and electro-mechanical equipment.
- Utilizes test equipment including, digital multimeters, megohmmeter testers, cable locators, thermal imaging, analog watt meters, component testers, pressure calibrators, telemetry monitors, and Windows-based personal computers.
- Reads and understands schematics and wiring.
- Maintains, troubleshoots, and updates PLC programs.
- Installs, maintains, troubleshoots and repairs high, medium and low voltage MCC, VFD, starters, power panel, control panel, motors, other electrical equipment, and services.
- Installs, maintains, troubleshoots and repairs general building power, interior and exterior lighting, security systems, and HVAC systems.
- Installs, maintains, troubleshoots and repairs process instrumentation, 24 VDC and lower.
- Creates and/or maintains a preventative maintenance program.
- Creates and/or maintains a spare parts inventory program.
- Operates assigned vehicle with responsibility for maintaining District tool inventory.
- Other duties as required and necessary to ensure the success of the organization.

Supervisory duties:

- None

Knowledge, skills and abilities:

- Ability to consistently promote, support, work, and act with an expectation of agency in a manner in support of the Districts' mission, vision, and values.
- Displays competent accountability of work vehicle, tools and equipment related to the job.
- Moderate interpersonal skills are required to exchange and interpret information and respond to routine questions. Interacts with co-workers, supervisors, and the public in person and/or by phone.
- Ability to work both independently and as part of the Technical Service team.
- Ability to communicate effectively with customers, co-workers, and supervisory staff verbally or in writing.
- Ability to conduct themselves in a responsible and professional manner at all times.
- Knowledge of hand and power tool operations with a safety conscious attitude.
- Must be computer literate and proficient in the use of maintenance and office programs.
- Must have a basic understanding of Supervisory Control and Data Acquisition (SCADA), Human Machine Interface (HMI) and Programmable Logic Controller (PLC) systems.
- Ability and maturity to perform assigned tasks unsupervised throughout an eight (8) hour day.
- Advanced knowledge of Municipal Water and Wastewater Facilities electrical and mechanical operations and process. PLC architecture, programming, and function; variable frequency drives (VFD's); Motor Control Centers (MCC's); motor soft-starters; across the line motor control components; electrical control systems; pressure sensors; analytical Instrumentation flow control systems.
- Must possess a sound working knowledge of the safety requirements and precautions that must be taken while working in close proximity to medium to high voltages.
- Knowledge of telemetry, calibration instruments, and specialized diagnostic equipment.
- Ability to interpret and work from technical manuals, schematics, blueprints, and troubleshoot and repair equipment.
- Must possess the ability to perform the essential functions of the position.

Additional Requirements/Licenses/Certifications:

- Required: Minimum Colorado State Journeyman Electrician license in good standing. Master Electrician license in good standing is also acceptable.
- Must have reliable transportation to get to work.
- Must have a valid Colorado Class "R" driver's license.
- Five years of related electrical hands-on field experience.
- Any equivalent combination of education, training, and experience.
- Incumbent must live within 30 minutes of the District wastewater treatment facility.
- May be required to rotate on-call responsibilities.

Materials, software and equipment directly used:

- Telephone, pager, 2-way radio, personal computing equipment, hand tools, power tools, diagnostic equipment, rigging equipment, pneumatic tools, forklift, utility vehicles, and others.
- Microsoft Office and Maintenance Management software, standard office materials and equipment.
- Machinery, instrumentation, test equipment and tools related to water treating and pumping operations.

- Water and Wastewater pumping machinery, instrumentation, tools, electrical and electronic test equipment.

Physical Activities:

The physical demands described here are representative of those that must be met by an employee to successfully perform the essential functions of this job.

- While performing the duties of this job, the employee is regularly required to talk or hear. May involve climbing ladders, stairs, steps, and traversing catwalk grating, pushing, pulling, bending, stooping, and kneeling on a frequent basis and working in confined space and manual dexterity required to complete work tasks through safe and proper operation of power and hand tools, and motor vehicles.
- Specific vision abilities required by this job include close vision, distance vision, color vision, and ability to adjust focus.
- Extremely strenuous physical work involving objects in excess of 100 pounds occasionally and/or up to 50 to 100 pounds frequently.
- Moving, positioning and carrying loads of up to 5 pounds upstairs and loading on four-foot-high surfaces frequently.

Education:

- High School Diploma or General Education Diploma (GED) equivalent is required.

Experience:

- Five (5) years of experience in industrial, water, wastewater, or similar maintenance is required.
- Safety training related to the industry.
- An equivalent combination of education and experience may be substituted on a year for year basis.

Working environment:

The work environment characteristics described here are representative of those an employee encounters while performing the essential functions of this job.

- Work may be performed in field, and office environments during all types of temperatures, weather conditions and all times of day or night while being exposed to excessive noise from machines. Snowy, wet, and muddy conditions may exist. Work may be done in confined or cramped spaces.
- Work will involve maintenance, repair and calibration, often in difficult areas.
- Regular and long-term exposure to work areas containing toxic/caustic/hazardous/volatile chemicals; extreme conditions such as hot/cold; sharp hazards; dust/fumes/gasses; electrical shock; moving mechanical parts; high pitched and/or constant loud noise; sometimes long-term contact with bacteria and odorous, infectious/obnoxious material.
- Ability to use gas monitoring equipment, safety tripod and harness and any other required safety equipment for entering both high and low hazard confined spaces.
- Personal Protective Equipment (PPE) required including cold weather gear, eye protection, gloves, and provided uniform.
- A clean and safety-conscientious environment required while employed.
- Work may involve long hours and overtime during holidays, weekends, and evenings.
- Subject to call-back work.
- May be required to rotate on-call responsibilities.

A driving record, criminal history background check, and drug and alcohol screening may be obtained prior to employment.

I have read this Job Description, asked for clarification of any items that are unclear to me, and agree to fulfill my duties as outlined. I understand that this is not all-inclusive, and that I will be responsible for performing other duties as assigned. I understand that this does not constitute a contract of employment and that either the company or I may terminate my employment at will, with or without cause.

Printed Name

Date

Signature