

PROVO CITY CLASSIFICATION SPECIFICATION	
Title: Wastewater Systems Instrumentation Technician III	Job Code: 2510
Date: February 6, 2023	EEO Code: TE
FLSA Designation: Non-exempt	Civil Service Status: Covered (UC)

DEFINITION: This is highly skilled electronic and electrical maintenance, including repair work on equipment and control systems in the Water Reclamation Plant.

CLASSIFICATION STANDARDS: Positions allocated to this classification are responsible to the Water Reclamation Maintenance Supervisor and perform all duties under limited supervision. This work is distinguished by its highly complex duties and guidance to lower-level technicians.

ESSENTIAL DUTIES: Perform highly complex diagnostics, preventative maintenance, cleanings, repairs, and replacement of all mechanical and electronic instrumentation and control systems, wastewater treatment plant equipment, and lift station equipment; interpret, modify, and update blueprints, schematics, or diagrams; maintain, troubleshoot, repair, and calibrate various pneumatic and electronic recording/indicating instruments, including pneumatic controllers, valve actuators, and level sensing devices; calibrate feed equipment; provide input for preventative maintenance schedules for assigned electronic systems; visually monitor and control all instrumentation equipment including meters, simulators, and software applications (configuration and communication procedures for plant control and supervisory control in addition to data acquisition and (SCADA) systems); perform highly complex diagnostics, installations, calibrations, maintenance, and programming of electronic and electrical equipment, including plant control systems, motor control circuitry, flow meters, transmitters, controllers, and other analytical equipment; perform complex equipment modifications for required process and design changes; rebuild equipment as necessary including programmable logic controllers, variable frequency drives, motors/motor controls, flow and pressure standards, and specialized testing equipment; troubleshoot, repair, configure, and assist in programming automated control systems involving variable frequency drives (VFD), proportional integral derivative (PID) flow, pressure, and temperature monitors, programmable logic controllers (PLC), input/output cards, and process analyzers; inspect and test gas detector assemblies; calibrate gas detector sensors, turbidity meters, pressure transmitters, and electrical conductivity meters, including level transmitters and flow transmitters; provide technical assistance to operators, electricians, maintenance mechanics, and other employees as needed.

Provide technical guidance to lower-level Instrumentation Technicians; reconcile and record work orders; maintain parts and supplies inventories; work with equipment vendors/contractors; may research product information and vendors; prepare and maintain records including instrumentation drawings, programming scripts, diagnostics, preventative maintenance, cleaning, repairs, and equipment replacement; support Wastewater Systems Electrician as needed; perform other related duties as required.

MINIMUM REQUIREMENTS: Bachelor's degree in Instrumentation Technology, Automation, Process Control Engineering, Robotics Technology, or closely-related field and 3 years of experience with telemetry, microcircuits, remote sensing, operational systems, computerized process control, or other related area **OR** an equivalent combination of job-related education and experience [substituting each 1 year of post-secondary education/training for 6 months of experience].


License(s)/Certification(s): A valid, lawful Driver License is required.

SELECTION FACTORS: ***Knowledge of:*** electrical circuits and wiring systems; related laws, codes, rules, and regulations governing functions of the position; policies and procedures established for the work system; operations, functions, and terminology common to the work; safety rules, practices, and procedures; basic English composition, spelling, and grammar. ***Skill in:*** reading, analyzing, and interpreting electrical and instrument technical manuals, Proportional Integral Derivative (PID) controllers, electrical schematics, blueprints, diagrams, and other documents; interpreting various instructions in oral, written, diagram, or schedule form; troubleshooting and resolving problems related to proper application of control systems, installation details, and equipment malfunctions; performing duties in a manner that demonstrates respect integrity, courtesy, and kindness towards coworkers, customers, and the general public; practicing trust-building behaviors. ***Ability to:*** work with mathematical concepts and calculations relating to industrial control systems; evaluate programs and procedures and make sound recommendations; effectively communicate, both orally and in writing, with outside contractors, vendors, and plant personnel at a technical or layperson level; prepare and maintain records and other documents; develop and maintain effective working relationships with the public, coworkers, and superiors; work at remote field sites with little or no supervision; demonstrate a high level of commitment to the principles of positive customer service.

TOOLS AND EQUIPMENT USED: Hand tools (mechanical, electrical, and pneumatic) including drill press, grinders, welders, soldering equipment, multi-meter, oscilloscope, current clamps, power supplies, analog/digital signal generators, and office equipment.

PHYSICAL DEMANDS: Requires stooping, crouching, crawling, bending, climbing stairs and ladders, working on scaffolding and in confined areas, standing for extended periods, and lifting, pushing, or pulling weights of up to 75 lbs.

ENVIRONMENTAL FACTORS: Regular exposure to hazardous conditions including, but not limited to, heights, electronics, high voltage, moving mechanical equipment, noise, variable temperatures, humid conditions, fumes, and toxic, caustic, or infectious materials. May include exposure to high-stress situations or environments including the meeting of strict deadlines and other stressful conditions related to the workplace. *Note: This position is subject to callback, standby, emergency work requirements, and other non-standard working hours including weekends and holidays.*



 Department Director

2/2/23

 Date



 Mayor/Chief Administrative Officer

2-6-2023

 Date

NOTE: The above statements describe the general nature and level of work being performed by the person(s) assigned to this classification. They are not intended to be an exhaustive list of all duties, responsibilities, and skills required of personnel so classified. Class specifications are not intended to and do not imply or create any employment, compensation, or contract rights to any person or persons. Management reserves the right to add, change, or delete any and all provisions of this classification at any time as needed without notice. Reasonable accommodations may be made for otherwise qualified individuals who require and request such accommodation. This classification specification supersedes earlier versions.