



San Juan Water District
9935 Auburn-Folsom Road
Granite Bay, California 95746
(916) 791-0115
www.sjwd.org

Instrumentation Technician Position Description

Status: FLSA Non-Exempt
Supervisor: Maintenance Chief
Effective Date: 2006

Supervision Received and Exercised

Receives direction from the Maintenance Chief and does not provide supervision to others.

Primary Function

To perform specialized and technical duties involving troubleshooting, maintaining, and repairing electrical and electronic equipment and instrumentation and controls associated with a domestic water treatment plant.

Essential Duties - *Duties may include, but are not limited to, the following:*

- Installs and maintains sophisticated instrumentation and control systems; develops and uses diagnostic problem solving techniques.
- Inspects, adjusts, and repairs electrical and electronic equipment such as motors, transducers, motor control centers, switches, wiring and circuits, and related devices.
- Installs, maintains, and troubleshoots control systems and water quality instruments and electrical systems and components as they related to treatment and distribution systems; maintains and troubleshoots hardware and software issues.
- Assists in the design of electrical systems.
- Consults with vendors, contractors, and District staff regarding new construction and equipment installations related to electrical and electronic systems and instrumentation and control systems.
- Modifies, installs, and supports systems and networks as they relate to the Supervisory Control and Data Acquisition (SCADA) system.
- Performs related duties as assigned.

Minimum Qualifications

Knowledge of:

- Practices and techniques used in the design, installation, testing, calibration, maintenance, and repair of electrical and electronic equipment and instrumentation and controls as they relate to water treatment and distribution systems.
- Principles associated with electrical circuitry.
- Treatment plant, pump stations, and distribution facilities.
- Current trends in information technology including hardware, software, and networks.
- Techniques used in the calibration of instrumentation and controls.

Ability to:

- Maintain and repair electrical and electronic equipment and instrumentation and controls.
- Apply mathematics.
- Test, diagnose, and troubleshoot a variety of electrical and electronic equipment and instrumentation and controls.
- Design and build electrical systems.
- Read and comprehend technical manuals.
- Maintain accurate records of preventative maintenance activities.
- Understand and carry out oral and written instructions.
- Initiate and maintain effective safety practices.
- Communicate effectively.
- Establish and maintain effective working relationships with District staff, outside organizations, and the public.

Experience and Education:

Any combination of training, education, and experience that has led to the acquisition of the knowledge, skills, and abilities as indicated above. A typical qualifying entrance background is:

Experience:

Two years of journey level experience in the design, construction, installation, modification, maintenance, and repair of electrical/electronic equipment and instrument systems and control devices common to a water treatment plant.

Education:

Equivalent to graduation from high school.

License or Certificate:

Possession of, or ability to obtain and maintain, an appropriate valid California motor vehicle operator's Class B license. Individuals who do not meet this requirement due to a physical disability will be considered on a case-by-case basis.

Physical Capabilities:

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. Reasonable accommodations may be made to enable individuals with disabilities to perform functions.

<i>Physical Requirements</i>	<i>Rarely (0-12%)</i>	<i>Occasionally (12-33%)</i>	<i>Frequently (34-66%)</i>	<i>Regularly (67-100%)</i>
Seeing				✓
Hearing				✓
Standing/Walking		✓		
Climbing/Stooping/Kneeling		✓		
Lifting/Pulling/Pushing		✓		
Approximate Maximum Weight to Lift		55 Pounds		
Fingering/Grasping/Feeling				✓
Describe Working Conditions	50 Percent Indoors, 50 Percent Outdoors			