

THE METROPOLITAN WATER DISTRICT OF SOUTHERN CALIFORNIA

INSTRUMENTATION AND CONTROL TECHNICIAN II

Group-Section: Water System	FLSA Status: Non-Exempt	Salary Grade: 39
Operations Group	Bargaining Unit: AFSCME	Job #: XA17

JOB SUMMARY

This is the intermediate level position performing Instrumentation and Control Technician II job duties.

DISTINGUISHING CHARACTERISTICS

Positions at this level apply basic skills while developing specialized skills in procedures, operations, techniques, tools, materials, and equipment appropriate to area of specialization. Established procedures for doing the work and a number of specific guidelines are available. The number and similarity of guidelines and work situations requires the employee to use judgment in locating and selecting the most appropriate guidelines, references, and procedures for application, and in making minor deviations to adapt the guidelines in specific cases. Situations to which the existing guidelines cannot be applied or significant proposed deviations from the guidelines are referred. The work consists of duties that involve related steps, processes, or methods. The work involves the execution of specific rules, regulations, or procedures and typically comprises a complete segment of an assignment or project of broader scope.

OVERSIGHT

Supervision Received: The supervisor provides continuing or individual assignments by indicating generally what is to be done, limitations, quality and quantity expected, deadlines, and priority of assignments. The supervisor provides additional, specific instructions for new, difficult, or unusual assignments including suggested work methods or advice on source material available. The employee uses initiative in carrying out recurring assignments independently without specific instruction, but refers deviations, problems, and unfamiliar situations not covered by instructions to the supervisor for decision or help. The supervisor assures that finished work and methods used are technically accurate and in compliance with instructions or established procedures. Review of the work increases with more difficult assignments if the employee has not previously performed similar assignments.

Supervision Given: None

JOB DUTIES

- 1. Assists in installing, testing, maintaining, troubleshooting, and repairing instrumentation, electronic equipment, control systems, and automation systems.
- 2. Assists with planning, installation, and configuration of copper and fiber optic networks; assists with maintaining switches, modems, routers, and frame relay access devices.
- 3. Assists in installing, maintaining, and repairing computer peripherals, data loggers, security systems, and uninterruptable power supplies. Assists with installing, maintaining, and troubleshooting video conferencing and monitoring equipment.

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- 4. Assists in installation, troubleshooting, maintenance, field testing, and adjustment of Supervisory Control and Data Acquisition components including remote terminal units and programmable logic controllers.
- 5. Assists to install, calibrate, maintain, and repair water quality and process control instrumentation.
- 6. Assists with installing, calibrating, and maintaining automatic meter reading equipment including flow meters.
- 7. Installs, maintains, and repairs telephone equipment.
- 8. Assists in conducting technical investigations and studies.
- 9. May participate on a project team.
- 10. Performs other related Instrumentation and Control Technician job duties as required.

EMPLOYMENT STANDARDS

MINIMUM QUALIFICATIONS

Education and Experience: High school diploma or general education development test (GED), completion of 40 semester units in electronics from an accredited college, university, vocational, or military school and two years relevant experience; or two years as an Instrumentation and Control Technician I.

Required Knowledge of: Fundamentals of electronics; basic communication networks and protocols; mechanical principles; safety practices and procedures; and current office technology and equipment.

Required Skills and Abilities to: Read and interpret plans, blueprints, technical manuals, electrical and electronic schematics; troubleshoot; perform applicable mathematic calculations; use applicable software applications and operating systems; manage time; use various electronic testing equipment; problem solve; prioritize and multi-task; communicate clearly and concisely, both verbally and in writing; establish and maintain effective working relationships with those contacted in the course of work; work independently and in a team environment; and operate current office equipment including computers and supporting applications.

CERTIFICATES, LICENSES, AND REGISTRATION REQUIREMENTS

Employees in this position may be required to obtain and maintain the following certifications, licensing, and registrations:

Certificates

- Forklift
- Manlift
- Successful completion of the Controls Systems Technician Associate Recognition Program from the Instrumentation Society of America

Licenses

• Valid California Class C Driver License that allows you to drive in the course of your employment

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Registrations

• None

PHYSICAL DEMANDS, WORK ENVIRONMENT, AND VISION REQUIREMENTS

The physical demands and work environment characteristics described here are representative of those that must be met or may be encountered by an employee to successfully perform the job duties of this job. Reasonable accommodations may be made to enable individuals with disabilities to perform the job duties.

Physical Demands: The work requires some physical exertion such as long periods of standing; walking over rough, uneven, or rocky surfaces; recurring bending, crouching, stooping, stretching, reaching, or similar activities; recurring lifting of moderately heavy items such as personal computers and record boxes. The work may require specific, but common, physical characteristics and abilities such as above-average agility and dexterity.

Work Environment: The work involves moderate risks or discomforts that require special safety precautions, e.g., working around moving parts, carts, or machines, or irritant chemicals; etc. Employees may be required to use protective clothing or gear such as masks, gowns, coats, boots, goggles, gloves, or shields.

Vision Requirements: Color vision (ability to identify and distinguish colors)

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