



THE METROPOLITAN WATER DISTRICT
OF SOUTHERN CALIFORNIA

ENGINEERING TECHNICIAN II

Group-Section: Various	FLSA Status: Non-Exempt Bargaining Unit: AFSCME	Salary Grade: 43 Job #: XA21A
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JOB SUMMARY

This is the intermediate level position performing Engineering 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

GENERAL

1. May assist in developing technical training materials for area of responsibility.
2. Assists in conducting analyses and investigations of technical issues, prepares reports and may make recommendations.
3. Assists in conducting technical studies, tests, inspections and research for area of responsibility.
4. Assists with preparing and reviewing estimates, plans, submittals, design criteria and specifications.
5. Assists with developing and preparing presentations; may deliver presentations.
6. May represent Metropolitan within area of responsibility to obtain or convey information.

7. May assist with administering contracts and agreements.
8. May serve on a project team.
9. Maintains databases within area of responsibility.
10. Assists with development and update of standards, procedures, guidelines and manuals.
11. Performs other related Engineering Technician job duties as required.

CORROSION

1. Assists with performing infrastructure condition assessments and implements protection measures.
2. Assists with performing testing, evaluation, and analysis in the areas of materials performance, selection, and metallurgy for infrastructure reliability.

MAINTENANCE MANAGEMENT

1. Assists with developing plans and implementing standard maintenance processes, strategies, and metrics for maintenance decisions.
2. Maintains, and assists with modifications, and participates in testing the Computerized Maintenance Management System.
3. Recommends standard frequency dates or maintenance intervals.

CONTROL SYSTEMS

1. Assists with the evaluation, testing, installation, and upgrades of Supervisory Control and Data Acquisition system.
2. Assists with plant startup for Supervisory Control and Data Acquisition instrumentation and control.
3. Assist with performing development, support and maintenance of Supervisory Control and Data Acquisition system software and hardware, database, graphics, and applications.
4. Assists with real-time Automatic Process Control and Programmable Logic Controller development, support and maintenance.
5. Assists with factory acceptance testing and integration of new systems and hardware and software upgrades.
6. Assists with reviewing and implementing Supervisory Control and Data Acquisition change requests.
7. Assists with Supervisory Control and Data Acquisition system administration, security, and network support and maintenance.

EMPLOYMENT STANDARDS

MINIMUM QUALIFICATIONS

Education and Experience: High school diploma or general education development test (GED), and two years of accredited college or university in engineering and four years of relevant experience, two years of which must have been at the Engineering Technician I level.

General Required Knowledge of: Practical application of engineering science and technology; arithmetic, algebra, geometry, trigonometry, and their applications; applicable federal, state and local laws, codes and regulations; design principles and techniques; technical research, analysis and report preparation; applicable safety practices; and current office equipment and technology.

Corrosion Required Knowledge of: Corrosion science; corrosion control methods including coatings, material selection and cathodic protection; waterworks corrosion issues and control methods.

Maintenance Management Required Knowledge of: Maintenance planning practices; computerized maintenance management systems; cost-benefit value analyses.

Control Systems Required Knowledge of: None

General Required Skills and Abilities to: Prepare presentations; perform calculations; apply safe work practices; plan and organize work; read and interpret plans, specifications and drawings; 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.

Corrosion Required Skills and Ability to: Inspect, test, and assess infrastructure and equipment to determine corrosion condition using standard methods and techniques; test appropriate corrosion control methods.

Maintenance Management Required Skills and Ability to: Implement maintenance plans and processes.

Control Systems Required Skills and Ability to: None

CERTIFICATIONS, LICENSES, AND REGISTRATION REQUIREMENTS

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

Certificates

- None

Licenses

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

Registrations

- None

Job Title: Engineering Technician II

Job Code: XA21A

Adopted: 03/11/13

Revised: 09/10/17

Supercedes:

Page 3

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 environment involves high risks with exposure to potentially dangerous situations or unusual environmental stress that require a range of safety and other precautions, e.g., irritant chemicals, electrically energized equipment including high voltage systems, working at great heights under extreme outdoor weather conditions, or similar situations where conditions cannot be controlled.

Vision Requirements: No special vision requirements.