



THE METROPOLITAN WATER DISTRICT
OF SOUTHERN CALIFORNIA

ENGINEERING TECHNICIAN I

Group-Section: Various	FLSA Status: Non-Exempt Bargaining Unit: AFSCME	Salary Grade: 38 Job #: XA20A
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JOB SUMMARY

This is the entry level position performing Engineering Technician I job duties.

DISTINGUISHING CHARACTERISTICS

Positions at this level learn to apply basic skills in procedures, operations, techniques, tools, materials and equipment appropriate to area of specialization; work assignments are routine in nature, requiring limited judgment and decision making. Specific and detailed guidelines covering all aspects of the assignment are provided; work is in strict adherence to the guidelines; deviations must be authorized. The work consists of tasks that are clear-cut and directly related.

OVERSIGHT

Supervision Received: For both one-of-a-kind and repetitive tasks the supervisor makes specific assignments that are accompanied by clear, detailed, and specific instructions. The employee works as instructed and consults with the supervisor as needed on all matters not specifically covered in the original instructions or guidelines. For all positions, the work is closely controlled. For some positions, the control is through the structured nature of the work itself; for others, it may be controlled by the circumstances in which it is performed. In some situations, the supervisor maintains control through review of the work, which may include checking progress or reviewing completed work for accuracy, adequacy, and adherence to instructions and established procedures.

Supervision Given: None

JOB DUTIES

GENERAL

1. Learns and assists with conducting analyses and investigations of technical issues and preparing reports.
2. Learns and assists in conducting technical studies, tests, inspections and research for area of responsibility.
3. Learns and assists to prepare estimates, plans, and specifications.
4. Learns and assists with developing and preparing presentations.
5. May serve on a project team.
6. Learns and assist to maintain databases within area of responsibility.
7. Learns and assists with updating standards, procedures, guidelines and manuals.
8. Performs other related Engineering Technician job duties as required.

CORROSION

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

MAINTENANCE MANAGEMENT

1. Learns and assists with the development of plans and implementing standard maintenance processes.
2. Learns and assists with entering data and running reports off of the Computerized Maintenance Management System.
3. Researches and compiles data for establishing standard frequency dates or maintenance intervals.

CONTROL SYSTEMS

1. Learns and assists with the evaluation, testing, installation, and upgrades of Supervisory Control and Data Acquisition system.
2. Learns and assists with performing development, support and maintenance of Supervisory Control and Data Acquisition system software and hardware, database, graphics, and applications.
3. Learns and assists with real-time Automatic Process Control and Programmable Logic Controller development, support and maintenance.
4. Learns and assists with reviewing and implementing Supervisory Control and Data Acquisition change requests.
5. Learns and 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 either two years of accredited college or university in engineering related coursework or two years of relevant experience.

General Required Knowledge of: Arithmetic, algebra, geometry, trigonometry; design principles; technical research, analysis and report preparation; and current office equipment and technology.

Corrosion Required Knowledge of: Corrosion science.

Maintenance Management Required Knowledge of: Maintenance planning practices.

Control Systems Required Knowledge of: None

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Adopted: 03/11/13

Effective: 06/30/19

Revised: 04/29/2020

Supersedes: 09/10/17

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General Required Skills and Abilities to: Perform calculations; read plans, specifications and drawings; use current office equipment and technology; 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: Learn to test and assess infrastructure and equipment.

Maintenance Management Required Skills and Ability to: Learn and assist with maintenance planning processes and practices.

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

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.

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