



THE METROPOLITAN WATER DISTRICT  
OF SOUTHERN CALIFORNIA

## **WATER TREATMENT PRINCIPAL ENGINEER (Project Manager)**

Group-Section: Treatment and Water Quality

FLSA Status: Exempt

Bargaining Unit: MAPA

Salary Grade: 064

Job #: 115

### **JOB SUMMARY**

Responsible for projects that affect the quality of the water produced by all treatment facilities, for special studies related to treatment plant unit processes, and water quality issues. Areas of responsibility include defining the project plan and objectives; developing budget, securing resources, and defining the scope of work and schedule; identifying the participants and defining roles; implementing study findings and recommendations; monitoring progress and reporting on outcome; and administering consulting contracts. This person may also serve as a high-level technical expert or provide high-level project management expertise for a specialized and complex project.

A project is an endeavor that has a fixed start and end date although the length is typically several years. A project has a specific project budget or financial scope and impact, milestones to track status and completion, and there are multiple steps required for completion. A project normally involves an internal team from multiple disciplines and external parties and involves negotiation and consensus building as part of the planning and development process.

### **OVERSIGHT**

**Supervision Received:** Receives direction from a Team Manager or above.

**Supervision Given:** May exercise technical and/or functional direction over assigned staff. Provides technical guidance to and coordinates the activities of assigned project participants.

### **JOB DUTIES**

1. Develops, coordinates, and implements water treatment plant operations and maintenance related projects; prepares a plan and defines the objectives; prepares a long-range plan including forecasting financial needs and preparing a budget for each treatment facility; outlines the scope of work and specific tasks associated with each phase of the project; and identifies and secures resources for the project.
2. Assesses the project needs as they relate to each facility; interprets regulatory requirements; identifies critical project management issues, advises appropriate staff, recommends solutions, and resolves complex project problems; and develops new processes and procedures to meet new requirements or anticipated changes.
3. Analyzes project goals, objectives, and priorities; recommends modifications for improving the project efficiency to management staff; and incorporates approved modifications.

4. Identifies the necessary staff and resources to accomplish the intended outcome at each facility; organizes the work assignments; assigns project activities; reviews and provides input on the standards of performance; manages project consultants and vendors; and performs complex professional project management work as a member of a project team.
5. Monitors and evaluates the efficiency and effectiveness of project administration and service delivery methods and procedures; and develops reports and makes presentations to management on key water treatment and related budgetary issues pertaining to the entire project or individual project activities.
6. Performs and reviews project management planning and project control including annual work plan, progress, cost forecasting, variances, change management, scheduling, close-out procedures, and project summary reports; maintains master schedules and informs management of potential scheduling conflicts; and prepares and reviews team mission statement, objectives, scope, task, schedules, budgets, and resources.
7. Analyzes proposed and current legislation and governmental policies, rules, and regulations; works with internal resources on various project issues; and determines their impact and develops recommendations for compliance.
8. Assumes administrative responsibility for various projects; recommends and administers policies and procedures; and develops and recommends goals, objectives, policies, procedures, and quality assurance standards for the projects.
9. Prepares and presents reports on project status to the Board, management staff, other departments, outside agencies, and the public.
10. Develops plans, strategies, and solutions for problems and issues associated with area of expertise to ensure accomplishment of organizational objectives and compliance with all applicable policies, rules, regulations, and laws.
11. Performs other related duties as required.

## **EMPLOYMENT STANDARDS**

### **MINIMUM QUALIFICATIONS**

**Education and Experience:** Bachelor's degree from an accredited college or university in engineering or a related field and ten years of increasingly responsible experience, of which two years must have been at the Senior Engineer level; or an Advanced degree from an accredited college or university in engineering or a related field and eight years of increasingly responsible experience, of which two years must have been at the Senior Engineer level.

**Required Knowledge of:** Water treatment principles including water quality, regulatory compliance, and water and power resources; water distribution, conveyance, and storage systems; advanced water treatment processes; water system operations and maintenance; water treatment chemicals; design and construction of facilities; management and supervisory concepts and techniques; team building; budgetary concepts and procedures; relevant federal, state, and local laws; project management; contract administration, training methods, and techniques; and engineering design principles; safety regulations; contract administration; and value engineering.

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**Required Skills and Abilities to:** Resolve complex water treatment problems; perform complex water treatment studies; plan and organize project work; review work products for detail and adherence to existing guidelines; negotiate project or contract changes; interpret and analyze results; plan, organize, and review the work of team members; review work products for detail and adherence to guidelines; encourage and facilitate cooperation; mentor, develop, and motivate team members; determine training needs of staff; exercise judgment and discretion; analyze problems, identify alternatives, and implement recommendations; communicate orally and in writing on administrative and technical topics; represent Metropolitan to public agencies, regulatory bodies, special interest groups, and members of the public; establish and maintain collaborative working relationships with all levels within the organization, other agencies, regulatory agencies, special interest groups, and the public; use business applications such as word processing, spreadsheets, database, presentation, and engineering applications; prepare presentations for Board of Directors, executive management, and all levels of the organization; and interact with utilities and agencies to negotiate problem resolutions.

## **CERTIFICATES, LICENSES, AND REGISTRATIONS REQUIREMENTS**

### **Certificates**

- None

### **Licenses**

- Valid California Class C Driver License
- License in good standing as a California Professional Engineer

### **Registrations**

- None

## **DESIRABLE QUALIFICATIONS**

Water Treatment Operator Certification issued by the California State Water Resources Control Board

## **PHYSICAL DEMANDS/WORK ENVIRONMENT**

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 essential functions of this job. Reasonable accommodations may be made to enable individuals with disabilities to perform the essential functions.

**Physical Demands:** The work is sedentary. Typically, the employee may sit comfortably to do the work. However, there may be some walking; standing; bending; carrying of light items such as paper, books, or small parts; driving an automobile, etc. No special physical demands are required to perform the work.

**Work Environment:** The work environment involves everyday risks or discomforts that require normal safety precautions typical of such places as offices, meeting and training rooms, libraries, and residences or commercial vehicles, e.g., use of safe work practices with office equipment, avoidance of trips and falls, observance of fire regulations and traffic signals, etc. The work area is adequately lighted, heated, and ventilated. May travel to various sites requiring overnight stay.

**Vision Requirements:** No special vision requirements.

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