



THE METROPOLITAN WATER DISTRICT
OF SOUTHERN CALIFORNIA

PRINCIPAL MICROBIOLOGIST

Group-Section: Water System
Operations Group

FLSA Status: Non-Exempt
Bargaining Unit: AFSCME

Salary Grade: 58
Job #: YA79

JOB SUMMARY

This is the specialized advanced journey level position performing Principal Microbiologist job duties.

DISTINGUISHING CHARACTERISTICS

Positions at this level are recognized as technical experts in the development and interpretation of guidelines. The work includes varied duties requiring many different and unrelated processes and methods applied to a broad range of activities or substantial depth of analysis. Decisions regarding what needs to be done include major areas of uncertainty in approach, methodology, or interpretation and evaluation processes resulting from such elements as continuing changes in program, technological developments, unknown phenomena, or conflicting requirements. The work requires originating new techniques, establishing criteria, or developing new information. The work involves isolating and defining unknown conditions, resolving critical problems, or developing new theories. The work product or service may affect activities, or the operation of other organizations.

OVERSIGHT

Supervision Received: The supervisor provides administrative direction with assignments in terms of broadly defined missions or functions. The employee has responsibility for planning, designing, and carrying out programs, projects, studies, or other work independently. Results of the work are considered as technically authoritative and are normally accepted without significant change. If the work should be reviewed, the review concerns such matters as fulfillment of program objectives, effect of advice and influence on the overall program, or the contribution to the advancement of technology. Recommendations for new projects and alteration of objectives are usually evaluated for such considerations as availability of funds and other resources, broad program goals, or priorities.

Supervision Given: Acts as a lead. Coordinates and reviews work assignments of employees performing the same general work as the lead on a day-to-day basis. Responsibilities may involve solving problems and providing instructions on work procedures.

JOB DUTIES

1. Plans and executes programs of multi-disciplinary nature and liaisons with internal and external groups.
2. Leads staff to ensure projects and other assignments are accurately completed. Evaluates and approves analytical data; interprets results as related to compliance with drinking water regulations, and current operational conditions, and program objectives.
3. Oversees the development, adoption, and revision of testing techniques and procedures.
4. Directs and may perform microbiological tests.

5. Performs and directs troubleshooting and maintenance on laboratory instrumentation.
6. Evaluates effectiveness and makes recommendations for water quality programs.
7. Prepares and reviews technical papers and reports regarding water quality issues and programs.
8. Conducts training on laboratory and field procedures and quality control protocols.
9. Provides technical review of literature relating to water quality issues and liaises with appropriate scientific and professional organizations.
10. Gives technical presentations to staff or outside groups on water quality related topics.
11. Acts as Project Manager; plans, coordinates, and conducts projects within area of responsibility, including monitoring scope, quality, budget, and schedule.
12. Performs other related Microbiologist job duties as required.

EMPLOYMENT STANDARDS

MINIMUM QUALIFICATIONS

Education and Experience: Bachelor's degree from an accredited college or university in a related field, and eight years of relevant experience; or Master's degree from an accredited college or university in a related field, and six years of relevant experience.

Required Knowledge of: Principles and practices of microbiology and laboratory methods; specialized laboratory and field techniques and instrumentation; primary and secondary drinking water regulations; emerging microbiological and water quality issues; drinking water treatment technologies; standard laboratory quality control requirements; laboratory information management system; laboratory and field safety protocols; advanced mathematics and statistics; project management; and current office technology and equipment.

Required Skills and Abilities to: Conduct data analysis and interpretation; project management; apply laboratory and field techniques; operate and troubleshoot analytical instrumentation; public speaking; convey technical material in a non-technical way; stay current on applicable drinking water and microbiological issues; advanced mathematics and statistics; use independent judgment and exercise discretion; 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; lead and train; and operate current office equipment including computers and supporting applications.

CERTIFICATES, LICENSES, AND REGISTRATIONS 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 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: No special vision requirements.