ASSOCIATE MICROBIOLOGIST

**Group-Section:** Water System Operations Group  
**FLSA Status:** Non-Exempt  
**Bargaining Unit:** AFSCME  
**Salary Grade:** 43  
**Job #:** YA76

**JOB SUMMARY**
This is the intermediate level position performing Associate Microbiologist job duties.

**DISTINGUISHING CHARACTERISTICS**
Positions at this level are provided 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. At this level, the employee may also determine which of several established alternatives to use. 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 decision regarding what needs to be done involves various choices requiring the employee to recognize the existence of and differences among a few easily recognizable situations. Actions to be taken or responses to be made differ in such things as the source of information, the kind of transactions or entries, or other differences of a factual nature. 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. Investigates and assists with development of new or improved environmental microbiological or biological testing methods and laboratory procedures for use in determining water quality, and evaluates the impact of water treatment processes.

2. Performs microbiological, biological, or chemical tests; evaluates data, validates results, and may provide recommendations.

3. Assists with the identification and evaluation of the effects of microbiological and biological processes on water quality and treatment in water systems and may make recommendations.
4. May perform sample collection and isolates and identifies aquatic organisms to aid in management and treatment strategies.

5. Assists with special research projects in support of water quality.

6. Prepares standard solutions, reagents, and media as required.

7. Collects and analyzes data related to water quality issues and assists in the preparation of technical reports.

8. Assists in developing or updating quality assurance, quality control policies, and standard operating procedures.

9. Provides technical support and training on laboratory procedures, instrumentation, and quality control protocols.

10. May participate in professional meetings, seminars, and workshops.

11. Operates, maintains, and troubleshoots laboratory and field equipment and instrumentation.

12. May participate on a project team.

13. 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 two years of relevant experience.

**Required Knowledge of:** Principles and practices of environmental microbiology and biology; general culture techniques; aseptic techniques; basic statistics; laboratory techniques and instrumentation; standard laboratory quality assurance and control requirements; laboratory information management system; laboratory safety protocols; and current office technology and equipment.

**Required Skills and Abilities to:** Use culturing, staining, and microscopy; data analysis; apply laboratory techniques; operate and troubleshoot instrumentation; 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 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.