

MICROBIOLOGIST

*Class specifications are intended to present a descriptive list of the range of duties performed by employees in the class. Specifications are **not** intended to reflect all duties performed within the job.*

DEFINITION

Under supervision, to perform journey-level professional laboratory testing to measure the sanitary quality of environmental samples using bacteriological, chemical, microscopic and physical analysis techniques; and to perform related work as required.

EXAMPLES OF DUTIES - *Examples of duties performed by employees in this class may not include all required duties, nor are all listed tasks necessarily performed by everyone in this class.*

Analyzes drinking water, environmental, and wastewater samples for coliform and enterococcus bacteria, uses fermentation test, membrane filter, pour plate method, etc.; reads culture tubes and agar plates to determine the extent of bacterial growth; prepares solutions and stains; prepares and sterilizes media and test equipment; identifies, classifies and photographs; prepares quality assurance documents and written records of all analyses; enters data into the main laboratory data base; prepares regulatory reports; performs maintenance on laboratory equipment; and provides back-up support for other laboratory functions.

DESIRABLE QUALIFICATIONS

Knowledge of:

- Bacteriology, math, chemistry and analytical techniques used in water/wastewater laboratories.

Ability to:

- Perform a broad range of routine and non-standard bench tests utilizing a variety of laboratory instruments;
- Adapt standard methods and techniques to different sample types;
- Read and follow instrument manuals;
- Maintain laboratory facilities and equipment;
- Use computer and common office, technical and database software programs; and
- Establish and maintain effective working relations with others.

Experience and Training Qualifications

Experience: One year of experience in a water/wastewater or clinical laboratory performing microbiological analyses; or an equivalent combination of education, training and experience.

Training: Equivalent to college graduation with a Bachelor's Degree in Microbiology or in the Biological Sciences with emphasis in microbiology.

License/Certificates: Possession of a Laboratory Analyst, Grade I certification issued by the American Waterworks Association (AWWA) or the California Water Pollution Control Association (CWPCA) within 24 months of appointment; and a valid California Class C Driver's License.

WORKING CONDITIONS

Environmental Conditions: Laboratory environment; exposure to wastewater and infectious materials; work in or with water.

Physical Conditions: Essential and marginal functions may require maintaining physical condition necessary for standing for prolonged periods of time; heavy or moderate lifting.