

# Water Employee Services Authority

## Water Quality Analyst

*Job descriptions are intended to present a descriptive list of the range of duties performed by employees in this job. Specifications are NOT intended to reflect all duties performed with the job.*

### **SUMMARY DESCRIPTION**

Under general supervision, ensures water system regulatory compliance; performs a variety of tasks associated with the planning and operation of the District's extensive water quality and related technical programs for raw water sources, collection, treatment, transmission, storage and distribution processes; maintains and operates the District's water/wastewater laboratory for microbiological and chemical analysis; assists in developing and operating on-going programs in water/wastewater treatment evaluation and plant optimization, pilot plant studies, source water monitoring programs, sampling and laboratory analysis protocol development, contaminant monitoring and response, and engineering design projects.

### **REPRESENTATIVE DUTIES**

*The following duties are typical for this classification. Incumbents may not perform all duties and/or may be required to perform additional or different duties from those set forth below to address business needs and changing business practices.*

- Assists in identifying, planning, organizing and scheduling the daily and long-term water quality activities as related to monitoring source waters, reservoirs, treatment plant, distribution system, and ground water sources.
- Coordinates the implementation and maintenance of water/wastewater quality monitoring and testing programs to comply with federal and local regulatory requirements; prepares reports for EVMWD, various regulatory agencies, consultants, and other public agencies, on water quality, dam operations, and water production.
- Performs complex microbiological, chemical, and water/wastewater quality tests to control treatment processes, determine plant efficiencies, and ensure compliance with regulatory requirements.
- Performs bacteriological tests on water/wastewater to assure safety, quality, and regulatory compliance; conducts special tests and analyses as needed.
- Performs pH, turbidity, UV spectrophotometer, HPC, MTF, hydrolabs, algae count on lake water and Bac-T on raw and domestic water; completes chain of custody forms; performs other laboratory analysis as needed.
- Assists in scheduling and implementing sampling events of all systems including reservoirs, treatment plant, distribution system, and groundwater sources.
- Interprets data obtained from tests; enters laboratory results into computer; maintains a written record of lab results and activities; prepares reports as necessary.
- Monitors and reviews the results of the quality assurance/control program; analyzes laboratory data and recommends treatment modifications; presents data analysis.
- Develops, updates, and implements required laboratory procedures and analyses.
- Assists in evaluation of water treatment and distribution facilities; participates in design and operation of pilot water treatment equipment to verify design parameters and collect necessary operating data.
- Investigates water quality problems, waste spills, and other related problems, including customer complaints, to resolve the issues; assists in recommending corrective action(s) to mitigate the situation.
- Assists in overseeing and implementing chloramination monitoring of sites disinfected with chloramines.
- Repairs, cleans and maintains equipment associated with the operation of a water treatment plant and laboratory.
- Requisitions chemicals, supplies, and equipment to perform assigned laboratory tasks.
- Coordinates with outside laboratories for special regulatory compliance sampling.
- Participates in reviewing and inputting well-sounding data.
- Trains staff in use of lab equipment as necessary.
- Responds to public inquiries in a courteous manner; provides information within the area of assignment.
- Reads, understands, and ensures compliance with the District Safety Manual; attends safety meetings, as required; reports all accidents, violations, or infractions to supervisor.
- Performs related duties as required.

**Water Quality Analyst (continued)****QUALIFICATIONS**

*The following generally describes the knowledge and ability required to enter the job and/or be learned within a short period of time in order to successfully perform the assigned duties.*

**Ability to:**

- Perform a full range of professional duties to ensure safe water is served to the public.
- Operate equipment and machinery that may require complex and rapid adjustments, such as laboratory analytical equipment, a motor vehicle, computer terminal, and telephone.
- Coordinate and participate in water quality testing and analysis.
- Review a variety of written reports and documentation including test results.
- Coordinate all sampling, testing, and results for outside agencies.
- Ensure compliance with regulatory agency testing and reporting.
- Adjust testing schedule according to test results and make recommendations to District personnel regarding treatment adjustments.
- Calibrate, clean, and perform minor repairs on assigned equipment and apparatus including laboratory analytical equipment.
- Accurately maintain and update manual and automated records and logs.
- Respond to requests and inquiries.
- Prepare clear and concise reports.
- Enter data at a speed necessary for successful job performance.
- Ensure adherence to safe work practices and procedures.
- Communicate clearly and concisely, both orally and in writing.
- Establish and maintain effective working relationships with those contacted in the course of work.

**Education and Experience Guidelines**

*Any combination of education and experience that would likely provide the required knowledge and abilities is qualifying. A typical way to obtain the knowledge and abilities would be:*

**Education/Training**

- Equivalent to a Bachelor's Degree from an accredited college or university with major course work in chemistry, microbiology, environmental science, environmental engineering, or a related field.

**Experience**

- Two year's of experience in a water quality testing laboratory, field sampling, and/or water treatment plant or water distribution system.

**Knowledge**

- Water utility operations.
- Principles and methods of water quality testing, treatment, and standards.
- Principles of chemistry as they apply to water.
- Analytical procedures used in a water quality program.
- Techniques for gathering and reporting information.
- Operational characteristics of equipment and tools used in the area of assignment including specialized sampling equipment and laboratory analytical equipment.
- Occupational hazards and standard safety practices.
- Mathematical principles.
- Pertinent federal, state, and local codes, laws, and regulations.

**Water Quality Analyst (continued)****Knowledge**

- Principles and procedures of record keeping and filing.
- Office procedures, methods, and equipment including computers and applicable software applications such as word processing, spreadsheets, and databases.

**License/Certification**

- Possession of an appropriate, valid driver's license.
- Certification required in District-provided CPR/First Aid training.
- Possession of a Grade I Certificate in Laboratory Technology issued by the CWEA or AWWA within 18 months of employment.

**PHYSICAL DEMANDS AND WORKING ENVIRONMENT**

*The conditions herein are representative of those that must be met 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 job functions.*

**ENVIRONMENT**

Outdoor and indoor environment; travel from site to site; exposure to noise and all types of weather and temperature conditions; work with or in water; work and/or walk on various surfaces including slippery or uneven surfaces; work on ladders/scaffolds; some tasks may risk exposure to toxic materials.

**PHYSICAL**

- Level Three

Incumbents require sufficient mobility to work in an office, laboratory, and field environment; travel to various locations to take samples; exert moderate but not constant physical effort, typically involving some combination of climbing and balancing, stooping, kneeling, crouching, lifting, carrying, pushing and pulling; walk, stand, and sit for prolonged periods of time; operate assigned equipment and vehicles; operate office equipment including use of a computer keyboard; ability to verbally communicate to exchange information.

**VISION**

See in the normal visual range with or without correction; vision sufficient to read computer screens and printed documents; and to operate assigned equipment.

**HEARING**

Hear in the normal audio range with or without correction.

**JOB STATUS:** Non-Exempt: Employees Association

**SALARY RANGE:** 30

**(WQA)**