

WATER QUALITY SUPERINTENDENT

DEFINITION

Under direction, plans, schedules, assigns, reviews, and supervises the work of staff involved in collecting field samples and performing a variety of laboratory tests and analyses of raw and potable water, wastewater, biosolids, and related samples; performs sample collection as-needed; implements and maintains the District laboratory's certification through California Environmental Laboratory Accreditation Program (ELAP); prepares a variety of water quality reports; provides responsible and complex support to the Principal Engineer-Water Quality Administrator; and performs related duties as assigned.

SUPERVISION RECEIVED AND EXERCISED

Receives direction from the Principal Engineer-Water Quality Administrator. Exercises direct supervision over professional and technical staff.

CLASS CHARACTERISTICS

This is the full supervisory-level class in the Water Quality class series that exercises independent judgment on diverse and specialized sampling, laboratory, and safety programs with accountability and ongoing decision-making responsibilities associated with the work. Incumbents are responsible for planning, organizing, supervising, reviewing, and evaluating the work of staff and for providing technical support to management in a variety of areas. Performance of the work requires the use of independence, initiative, and discretion within established guidelines. This class is distinguished from the Principal Engineer-Water Quality Administrator in that the latter is a management-level class with responsibility for managing the Water Systems Engineering section.

EXAMPLES OF TYPICAL JOB FUNCTIONS (Illustrative Only)

Management reserves the right to add, modify, change, or rescind the work assignments of different positions and to make reasonable accommodations so that qualified employees can perform the typical functions of the job.

- Plans, organizes, assigns, supervises, and reviews the work of assigned staff; trains staff in work procedures; evaluates employee performance, counsels employees, and effectively recommends initial disciplinary action; assists in selection and promotion.
- Participates in the development of goals, objectives, policies, and procedures; recommends and implements policies and procedures including standard operating procedures for assigned operations.
- Monitors activities of the assigned work unit(s); identifies opportunities for improving service delivery and procedures; provides recommendations concerning process changes and reviews with appropriate management staff; implements improvements.
- Coordinates assigned services and operations with those of other divisions and outside agencies.
- Participates in annual budget preparation; identifies resource needs and prepares detailed cost estimates with appropriate justifications; monitors expenditures.
- Serves as the District's Laboratory Director/Technical Quality Manager, as defined under regulations for Certified Environmental Laboratories; establishes and maintains a strong position in regulatory compliance and reporting required by the California ELAP accreditation

and related federal, state, and local regulations.

- Develops, implements, and reviews TNI standards related to quality assurance and quality control (QA/QC) programs; ensures laboratory practices and procedures are in accordance with acceptable occupational and environmental safety standards.
- Participates in the development of improved treatment processes and reviews monitoring programs concerning water quality; recommends changes in monitoring programs and treatment and process control processes to improve efficiency and water quality.
- Supervises collection and analysis of samples; performs sample collection and a variety of laboratory tests and analyses and interprets results related to the treatment, quality, and distribution of water, treatment of wastewater, and plant efficiencies; reviews laboratory results to ensure regulatory requirements are met; identifies problems and determines probable causes; recommends and implements corrective measures.
- Directs the preparation of reagents and media and calibration and maintenance of laboratory instruments.
- Directs use of the laboratory information management system (LIMS) and related databases for the purpose of gathering and analyzing data related to laboratory operations and compliance; directs and ensures the maintenance of accurate, current, and complete laboratory data, results, and records.
- Supervises the analyses and reports completed by commercial laboratories; reviews and approves results and reports; approves changes in testing procedures; reviews and approves invoices and ensures services provided meet contractual requirements.
- Prepares and reviews monitoring and compliance reports; submits reports to local, state, and federal agencies.
- Implements the District's safety program for field and laboratory units including reviewing, approving, and implementing safety manual and chemical hygiene plan changes as needed; attends safety meetings, as required; reports all accidents, violations, or infractions to the manager.
- Provides staff assistance to the Water Quality Administrator; researches, analyzes, summarizes, and interprets data from various sources; prepares various staff reports, correspondence, and other documents.
- Attends meetings, conferences, workshops, and training sessions and reviews publications to remain current on principles, practices, technologies, regulations, and new developments and changes in the field of water quality and laboratory programs; implements policy and procedural changes after approval.
- Answers questions and provides information to the public and other agencies; investigates and responds to complaints and inquiries; recommends corrective actions to resolve issues.
- Performs related duties as required.

QUALIFICATIONS

Knowledge of:

- Principles and practices of employee supervision, including work planning, assignment, review and evaluation, discipline, and the training of staff in work procedures.
- Principles and practices of leadership.
- Principles and techniques for working with groups and fostering effective team interaction to ensure teamwork is conducted smoothly.
- Principles and practices of budget administration.
- Principles, practices, techniques, equipment, and materials required for sample collection and laboratory analyses related to the treatment, quality, and distribution of water, treatment of wastewater, and plant efficiencies.

- Design and implementation of monitoring, QA/QC, sampling, laboratory safety, and specialized research programs.
- Principles and processes of water treatment and distribution and wastewater collection and treatment.
- Operational characteristics, use of, and maintenance/calibration requirements of modern laboratory and sampling equipment.
- Occupational hazards and standard safety procedures related to laboratory and sampling work.
- Basic and advanced mathematic and statistical techniques.
- Record keeping and filing system methods, principles, and practices.
- Principles and practices of business correspondence and technical report preparation.
- Applicable federal, state, and local laws, codes, and ordinances and District policies and procedures relevant to area(s) of responsibility.
- Techniques for providing a high level of customer service by effectively dealing with the public, vendors, contractors, and District staff.
- The structure and content of the English language, including the meaning and spelling of words, rules of composition, and grammar.
- Modern equipment and communication tools used for business functions and program, project, and task coordination, including computers and software programs relevant to work performed.

Ability to:

- Select and supervise staff, provide training and development opportunities, ensure work is performed effectively, and evaluate performance in an objective and positive manner.
- Supervise and perform a variety of laboratory analyses of raw and potable water, wastewater, biosolids, and related samples.
- Analyze the results of such tests and make appropriate recommendations for modifications to laboratory procedures and plant operations.
- Supervise the use, calibration, and minor maintenance on a variety of laboratory equipment, including specialized instrumentation.
- Plan, develop, and implement sampling, QA/QC, laboratory safety, and specialized research programs.
- Analyze, interpret, summarize, and present technical information and data in an effective manner.
- Research, analyze, evaluate, and develop improvements in or new laboratory and sampling methods, procedures, and techniques.
- Prepare clear and concise reports, correspondence, procedures, and other written materials.
- Make accurate mathematical and statistical computations.
- Establish and supervise the maintenance of a variety of filing, record-keeping, and tracking systems.
- Safely and effectively use and operate a vehicle and tools and equipment required for the work.
- Effectively represent the District in meetings with governmental agencies, community groups, and various businesses, professional, and regulatory organizations, and in meetings with individuals.
- Independently organize work, set priorities, meet critical deadlines and follow-up on assignments.
- Use tact, initiative, prudence, and independent judgment within general policy and procedural guidelines.
- Effectively use computer systems, software applications relevant to work performed, and modern business equipment to perform a variety of work tasks.

- Communicate clearly and concisely, both orally and in writing, using appropriate English grammar and syntax.
- Establish, maintain, and foster positive and effective working relationships with those contacted in the course of work.

Education and Experience:

Any combination of training and experience that would provide the required knowledge, skills, and abilities is qualifying. A typical way to obtain the required qualifications would be:

Education:

Equivalent to a bachelor's degree from an accredited college or university in chemistry, biochemistry, biology, microbiology, environmental, sanitary, or chemical engineering, natural or physical science.

Experience:

- Six (6) years of experience in a certified drinking water or environmental laboratory conducting analysis of chemical, biological, or microbiological samples including two (2) years of lead or supervisory experience.

Licenses and Certifications:

- Possession of a valid California Class C driver's license, to be maintained throughout employment.
- Possession of valid Laboratory Analyst Grade II Certificate issued by the California Water Environment Association.
- Possession of a valid Laboratory Analyst Grade III Certificate issued by the California Water Environment Association within twelve (12) months of hire.

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.