

CITY OF BRISBANE

WATER QUALITY TECHNICIAN

Definition

Performs field sampling and analysis associated with the testing of drinking water quality and other related duties; keeps detailed and accurate records; and maintains overall compliance with all federal, state and local drinking water monitoring and reporting regulations.

Class Characteristics

This is a journey level technician classification that performs routine and emergency field sampling, testing and analysis from drinking water reservoirs and distribution system, monitoring vaults, hydrant flushing, wastewater collection systems, storm water system discharges and other sources as required using established techniques and procedures. Under general supervision, incumbents with an appropriate educational or equivalent technical background perform routine physical, chemical and microbiological field sampling and analyses of drinking water, stormwater discharge, landfill gases, and other related monitoring analyses. As knowledge and experience are gained, the work becomes broader in scope, and assignments are more varied.

Supervision Received and Exercised

Receives general supervision from the Deputy Director of Public Works or Senior Civil Engineer.

No supervisory responsibilities.

Example of Duties: (Illustrative Only)

- Performs routine physical, chemical and microbiological field sampling and analyses of drinking water, stormwater discharge, landfill gases, and other related monitoring analyses.
- Prepares and delivers samples for inorganic, organic and bacteriological analysis at an offsite state certified drinking water laboratory and follows strict quality assurance protocols to ensure proper sample collection and documentation; including chain-of-custody forms, internal field tracking forms and compliance data logs prior to delivery to the laboratory.
- Performs routine and emergency field sampling and analysis from drinking water reservoirs and distribution system, monitoring vaults, hydrant flushing, wastewater collection systems, storm water system discharges and other sources as required using established techniques and procedures; performs field tests for total and free chlorine residual, monochloramine, free ammonia, nitrites, nitrates, pH, temperature, conductivity, turbidity and other related tests.
- Collects, monitors and records data for both public and private facilities that includes the monitoring, sampling and reporting of landfill gases, infiltrate water and other site characteristics in accordance with strict state and county permit requirements.
- Conducts sampling, analysis and reporting in accordance with established Quality Assurance (QA) protocols; submits clear and detailed daily field records and site sheets documenting all sampling and monitoring activities and clearly and accurately compiles all the field and laboratory data into monthly and annual regulatory reporting.
- Operates, maintains, calibrates and properly documents the use of automated sampling equipment, multiparameter portable colorimeters, field gas detectors, pH monitoring meters, turbidity meters, flow and level meters and a variety of other field equipment.
- Prepares and reviews reports, charts, and graphs as required.
- Responds to customer complaints concerning water quality, investigates the complaint and provides accurate information as to the source of the problem.
- Performs related duties as needed or assigned.

QUALIFICATIONS:

Knowledge of:

- Principles and practices of water quality related to public infrastructure.
- Field water sampling techniques such as total chlorine, turbidity, total suspended solids, pH, free ammonia, nitrite and nitrate, methane gas, etc.
- General understanding of Environmental Protection Agency (EPA) Standard Methods and other approved standard protocols for water quality sampling and analysis.
- Software applications including Microsoft Word, Excel and PowerPoint.
- Techniques for effectively representing the City in contacts with governmental agencies, community groups, developers, contractors and the public.
- Techniques for dealing with a variety of individuals from various socio-economic, cultural and ethnic backgrounds, in person and over the telephone.

Skill in:

- Conducting field analyses such as free and total chlorine, free ammonia, nitrite, pH, conductivity, alkalinity, dissolved oxygen, methane gas, etc.
- Collecting water samples in accordance with EPA and other approved standard protocols including microbiological, VOCs and SVOCs, metals; and following all sampling QA/QC protocol.
- Completing water sample documentation and chain of custody records.
- Preparing clear, concise and accurate reports, correspondence, procedures and other written materials under general supervision.
- Maintaining accurate records and files.
- Establishing and maintaining effective working relationships with those contacted in the course of the work and communicating effectively, both orally and in writing.
- Functioning under demanding time pressure, responding in a positive manner to supervision, and attending work and performing duties on a regular and consistent basis.

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

Education:

Equivalent to completion of the twelfth (12) grade, GED, or higher level degree.

Experience:

Two years of experience in a water or wastewater utility performing laboratory and/or field technician duties is required. An Associate degree in biology, chemistry, microbiology, engineering or related field may substitute for the required experience.

Licenses:

Must possess a valid California class C driver's license and have a satisfactory driving record. Possession of a State of California Department of Drinking Water Distribution Operator Grade 2 (D2) certificate is required, or obtained within one year of appointment. Possession of any mandated regulatory certifications for water quality certifications required by regulatory agencies and the City within 18 months of notification. Such certification must be maintained during employment.

Physical Demands: Must possess mobility to work in a standard office setting, to perform routine analyses field sampling, to operate a motor vehicle and to visit various City sites; ability to move up to 20 pounds; vision to read printed materials and a computer screen; and hearing and speech to communicate in person, before groups and over the telephone.

Approved Date: January 7, 2021
Resolution: 2021-01

Revised Date:
Resolution:

Bargaining Unit: General Employees Association
Resolution: 2021-01

Former Titles:

Abolished: