

POSITION DESCRIPTION
WATER WORKS AND SEWER BOARD
City of Anniston, Alabama

JOB TITLE: WATER QUALITY ANALYST

CODE: 604

NATURE OF WORK

Supervises and coordinates water treatment laboratory operations, conducts chemical and bacteriological tests on water samples, verifies accuracy of tests, records and reports results of tests to regulatory agencies, coordinates with outside laboratories concerning sampling, analyzing, and reporting results; and assures compliance with federal, state, and local regulations governing potable water treatment and distribution for a medium-sized public water system.

Work involves chemical and microbiological sampling and analysis of water in order to provide the highest quality potable drinking water to customers in the area. Includes supervision of state-certified microbiological laboratory including development, maintenance, and adherence to standard operating procedures to meet state and federal requirements and maintain certification. Guided by EPA and ADEM guidelines and regulations, using standard methods, incumbent takes both water and wastewater samples, analyzes, issues corrective actions and makes changes, records and reports results, and routinely uploads or enters results to state or federal database. Conducts corrosion control or other compliance-related studies; takes bacteriological, inorganic, organic, or radiological samples; coordinates lead and copper monitoring with customers; and conducts EPA/ADEM/ADPH evaluation performance study or bacteriological performance study, and tours at various facilities. Collects bacteriological samples after new distribution lines are installed. Develops sampling plans as required for regulatory compliance and submission to regulatory agency. Incumbent works under the general supervision of the General Manager and Manager Engineering Services. This position is subject to 24-hour call.

EXAMPLES OF WORK PERFORMED

(Anyone position may not include all of the duties listed, nor do the listed examples include all possible tasks which may be found in positions of this class.)

Continuously sample and analyze water using standard methods of examination.

Initiate corrective action; adjusts materials, methods, calibration, blending, or other changes required in order to produce and distribute safe water to the public.

Maintain inventory of laboratory supplies, order supplies as required, and plan for fiscal budget.

Operate and calibrate incubators, ovens, spectrophotometer, pH meter, dissolved oxygen meter, analytical balance, or other laboratory equipment common to water treatment and testing.

Perform operations and safety tasks to promote the safety of self and others and to ensure the water supply is potable, and meets required standards. Record and report on a daily or other basis and submit written reports as required.

Inspect materials, equipment, and supplies, and ensure that the laboratory and facilities are maintained in a high state of cleanliness and safety.

REQUIRED KNOWLEDGE, SKILLS AND ABILITIES

Thorough knowledge of ADEM and EPA rules and regulations governing public water systems.

Thorough knowledge of standard methods of water examination.

Considerable knowledge of occupational hazards and safety precautions common to laboratories and water systems.

Considerable knowledge of the methods and materials utilized in the conduct of laboratory tests at a municipal water treatment plant.

Ability to read, interpret, and understand complex chemical charts, symbols, diagrams, and schematics.

Ability to efficiently use computer and software for writing plans and reports, maintaining and compiling information, organizing files, and uploading data.

Ability to determine requirements and to order supplies and chemicals as needed and required.

Ability to understand, follow, and transmit written and oral instructions.

Ability to prepare detailed and complex work, time, material, ADEM and EPA reports as required.

Ability to perform complex mathematical calculations, chemical analysis, microbiological tests and other tests and analysis on a routine and intermittent basis.

Ability to recognize and remedy disorders and malfunctions, and take corrective action in order to maintain acceptable levels of water purity.

PHYSICAL REQUIREMENTS

Sufficient physical strength to lift at least 50 pounds, and perform other strenuous physical and mental tasks over extended periods of time while standing. Ability to bend, stoop, crouch and crawl. Must have normal hearing and adequate close vision (may be corrected), and color perception.

DESIRABLE EXPERIENCE AND TRAINING

A four-year Bachelor of Science degree in chemistry, microbiology, biology, or equivalent from an accredited college or university is required.

Two weeks of training at a federal or state agency; or at an academic institution in microbiological analysis of drinking water; or 80 hours of on-the-job training at a certified microbiological laboratory is desired.

Some experience is desired in municipal water and wastewater treatment chemical analysis, microbiology, physics and environmental courses.

NECESSARY SPECIAL REQUIREMENTS

Must possess a valid State of Alabama driver's license and a driving record suitable for insurability.