MAJOR FUNCTION

This is professional technical and supervisory work overseeing all analytical sections of the Water Quality Laboratory. Work is performed in accordance with established policies and procedures under the general supervision of the Water Quality Administrator, or his/her designee; however, the employee is expected to exercise considerable independent judgment in the performance of duties and the daily operation of the laboratory. Work is reviewed through conferences, written reports, observation of productivity, compliance and results achieved.

ESSENTIAL AND OTHER IMPORTANT JOB DUTIES

Essential Duties

Plans, supervises, directs, assists with troubleshooting, and possesses the ability to perform general and complex analyses on water, wastewater, groundwater, sediment, sludge and related environmental samples for the laboratory. Duties include extensive knowledge, oversight, training, performance of analyses as necessary, and ensuring coverage of all analyses of samples delivered to the water quality laboratory such as microbiology, physical chemistry, nutrients, metals, semi-volatiles and volatiles organic chemistry. Oversees lab operations in accordance with Florida Department of Health (FDOH) laboratory accreditation standards, federal, state and local regulations. Directs the laboratory workflow (including samples to sub-contract laboratories) and staff assignments. Ability to perform basic maintenance of analytical equipment, and extensive knowledge of, routine maintenance required. Coordinates and schedules advanced maintenance, repair and/or replacement for laboratory equipment. Communicates with the Water Quality Administrator to plan for project/workflow changes and budgetary needs. Responsible for quality assurance, ensuring that all laboratory documentation meets City policy and FDOH accreditation requirements. Keeps abreast of new or more efficient procedures/analyses, working with staff to attend trainings, initiating method development, and developing/implementing new processes as appropriate. Performs data approval and reporting using the laboratory information management system (LIMS). Directs supervision and training of technicians and analysts, as well as wastewater and water treatment plant operators in sample collection and handling as needed. Manages, and designates, as applicable, laboratory purchases (following City Policies and applicable regulations) including analytical supplies, equipment (installation and training), and service contracts. Possesses the technical ability to research, evaluate, and negotiate with vendors to purchase equipment, including purchases above \$100 thousand in value. Ensures all City safety protocols are followed, including those based on laboratory guidelines and departmental programs such as the Environmental Management and Safety program. Supports and requests the resources needed to implement safety practices. Follows City policies and procedures to recommend, hire, transfer, promote, discipline, or terminate subordinate personnel. Plans, assigns, and evaluates the work, including performance evaluations as required. Works with the Water Quality Administrator to implement the Laboratory Analyst Career Progression program. Attends meetings and performs related work, as required.

Other Important Duties

Ensures that the laboratory facility cleanliness, and order is maintained, promptly communicating any issues to the Water Quality Administrator or other applicable parties.

DESIRABLE QUALIFICATIONS

Knowledge, Abilities and Skills

Considerable knowledge of biological testing, inorganic, organic and analytical chemistry. Considerable knowledge of mathematics. Considerable knowledge of gas chromatography/mass spectrometry, electron capture gas chromatography, atomic absorption spectrophotometry, inductively coupled plasma optical emission spectroscopy and mass spectrometry, discrete and flow segmented auto analyzer, UV VIS spectrophotometer, and ion specific electrodes as they relate to the analyses of environmental samples. Knowledge of hazards and safety precautions required in using chemicals

and reagents and performing laboratory tests. Knowledge of state and federal laws governing Safe Drinking Water Act and Priority Pollutants analyses. Knowledge of and ability to maintain and repair electrical and mechanical measuring and testing devices commonly used in an analytical laboratory. Ability to organize, train and supervise the work of subordinates. Ability to prepare and deliver presentations and written reports, follow complex oral and written instructions, and communicate effectively, both orally and in writing. Ability to establish and maintain effective working relationships as necessitated by the work. Skilled in the use of microcomputers and the programs and applications necessary for successful job performance.

Minimum Training and Experience

Possession of a bachelor's degree in biology, chemistry, biochemistry, environmental science, or related field and four years of professional work experience in water and/or wastewater monitoring or environmental analysis using EPA and Standard Methods protocol; or an equivalent combination of training and experience. A master's degree in one of the above areas may be substituted for one year of experience.

Necessary Special Requirement

Within one year of employment, the employee must meet the qualifications to serve as the laboratory Technical Manager (per FDOH accreditation standards) in the areas of chemistry, biology, and microbiology.

Established: 12-27-85 Revised: 08-04-86

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