MAJOR FUNCTION

This is professional level biological laboratory work performing routine and non-routine biological analyses involving microorganisms and bacteria. Work involves performing microbiological analysis and microscopic examination of various types of waters and classifying microorganisms and bacteria. Duties are performed with independence. Work is performed under the general supervision of the Supervisor-Analytical Chemistry.

ESSENTIAL AND OTHER IMPORTANT JOB DUTIES

Essential Duties

Performs microbiological analysis on wastewater, drinking water and ambient waters. Performs various tests in accordance with Standard Methods, state and local regulations. Performs microscopic examination of ambient waters, drinking water and wastewaters. Identifies common algae and macro invertebrates. Analyzes and tests environmental samples for biochemical oxygen demand (BOD), chemical oxygen demand (COD) and total organic carbon (TOC). Assists in the supervision and training of laboratory technicians and wastewater operators in the area of water sampling. Maintains laboratory equipment and supplies. Communicates equipment and supply needs to supervisor. Maintains quality assurance records, performs quality control tests and reports quality control results to Supervisor-Analytical Chemistry. Performs related work as required.

Other Important Duties

Assists in the development and revision of procedures. Completes special projects, as assigned. Keeps abreast of events, developments and advancements in area relating to job responsibilities. Performs related work as required.

DESIRABLE QUALIFICATIONS

Knowledge, Abilities and Skills

Considerable knowledge of biological and microbiological techniques and theories. Considerable knowledge of standard laboratory practices and procedures, terminology, hazards, and safety requirements. Considerable knowledge of water and wastewater biology. Knowledge of mathematics sufficient for routine laboratory calculations and procedures. Some knowledge of statistics, with ability to use least square and normal distribution analysis. Ability to understand and follow complex oral and written instructions. Ability to maintain records and statistical reports. Ability to communicate effectively both orally and in writing. Ability to learn, understand and apply environmental regulations, policies and procedures. Ability to utilize problem solving techniques. Ability to establish and maintain effective working relationships as necessitated by the work.

Minimum Training and Experience

Possession of a bachelor's degree in biology, microbiology, environmental science, public health or medical technology and one year of technical or professional experience in environmental water and/or wastewater analysis; or an equivalent combination of training and experience.

Established: 09-10-91
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