

UTILITIES LABORATORY SUPERVISOR

NATURE OF WORK

This is professional work assisting with directing the sample collection, data management and reporting for a water quality laboratory or a water pollution control laboratory.

Work involves responsibility for the safe and efficient operation and maintenance of the laboratory; supervision and participation in sampling and testing procedures to determine (a) the operating efficiency of the water plant, daily water quality of the distribution system and compliance with the Safe Drinking Water Act and to enable analysis of raw and treated water or (b) the operating efficiency of the wastewater treatment plant and to enable analysis of industrial wastewater. Work requires advanced knowledge in the methods, procedures and equipment used for the analysis of water or of raw and treated water, wastewater and biosolids. Supervision is received from an administrative superior with work being reviewed through conferences, reports and results achieved. Supervision may be exercised over skilled subordinates.

EXAMPLES OF WORK PERFORMED

Plans and supervises the proper tests of water, wastewater and solid samples collected; evaluates analytical procedures at various stages to provide accurate and timely information.

Supervises and schedules the collection of water samples at various points in the treatment and distribution system; plans and supervises the proper tests of samples collected; evaluates water samples and test results to determine the effectiveness of treatment.

Assists in budget planning regarding laboratory expenditures; reviews and approves requisitions for supplies, equipment, and materials directly related to analytical procedures; consults with an administrative superior to determine staffing and equipment needs.

Assures proper calibration and maintenance of all laboratory equipment.

Supervises and participates in compiling accurate daily records of all analysis performed; maintains an ongoing QC/QA program to insure data validation, including checking and auditing of computer data base; submits reports to administrative superior as requested.

Reviews and evaluates new laboratory procedures; monitors all analytical procedures to verify precise and accurate results as requested.

Tests and monitors the quality of the raw water supply from the well fields and river and recommends operating criteria for ensuring the quality of the raw water supply.

Reviews and interprets laboratory testing data and recommends cost effective operating and process criteria for maintaining the quality of the treated water production.

Recommends and coordinates contract laboratory testing; recommends training and assists in the instruction of laboratory personnel in the methods of bacteriological and chemical testing, laboratory hygiene, and laboratory safety practices; provides technical support to laboratory personnel in solving analytical problems; sets laboratory priorities.

Instructs the water plant operators and others involved in water distribution system maintenance and repairs in the methods of sample collection and standard water quality tests.

Prepares periodic reports of bacteriological and chemical data on raw and treated water; submits required periodic water quality test results to the Nebraska State Health Department.

Prepares evaluations of water quality data using various electronic tools such as Laboratory Information Management Systems, water distribution modeling software and spreadsheets; provides conclusions and recommendations for modifying process control and corrective actions and improvements to distribution system water quality.

Manages, responds, tracks and resolved water quality complaints utilizing proper customer care tracking software.

Assists in preparing water quality information for the public and customer use to include in the Consumer Confidence Report and pamphlets.

Responds promptly to customer water quality inquiries; performs public relations duties as directed in informing the public of water quality.

Performs related work as required.

DESIRABLE KNOWLEDGE, ABILITIES AND SKILLS

Thorough knowledge of the care, operation and limits of equipment, materials and supplies required to operate and maintain the laboratory.

Thorough knowledge of chemical usage and ozone production as it relates to water treatment.

Thorough knowledge of the accepted chemical and physical analysis of environmental samples including but not limited to water, groundwater, wastewater and biosolids.

Thorough knowledge of State and Federal Agency Regulations for water quality testing requirements and procedures.

Knowledge of state-of-the-art laboratory instrumentation and equipment.

Ability to independently perform standardized and specialized water laboratory analysis.

Ability to supervise, plan, perform and analyze the required tests using approved methods and procedures.

Ability to follow complex oral and written instructions.

Ability to train, supervise and evaluate the laboratory work group.

Ability to plan the work of subordinate personnel.

Ability to exercise good judgment in the area of safety awareness and safety habits.

Ability to interpret and present analytical data utilizing laboratory and spreadsheet software.

Skill in the care and use of a variety of modern complex laboratory apparatus and equipment.

MINIMUM QUALIFICATIONS

Graduation from an accredited four-year college or university with major coursework in chemistry, biology, environmental studies or related field and two years of experience in a laboratory performing comprehensive work related to the analysis of water or wastewater with six months of experience in a supervisory capacity; or any equivalent combination of training and experience that provides the desirable knowledge, abilities and skills.

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