

LABORATORY TECHNICIAN

GENERAL STATEMENT OF DUTIES

Skilled technical and administrative laboratory work in the operation and maintenance of a drinking water treatment plant laboratory including; maintaining and monitoring numerous programs to ensure compliance with state and federal laws and regulations; implementing and maintaining the lab's Quality Assurance Plan, while employing quality control procedures; implementing and maintaining source protection monitoring programs; collecting and processing various water samples throughout the treatment process, distribution system, lake, tributaries, and watershed; and all other similar duties necessary to the operations of the Plant. Responds to inquiries and complaints from customers. This position reports to the Supervisor of Operations.

QUALIFICATIONS

Education and Experience

Bachelor's Degree in biology, chemistry, or related field; three years of responsible experience in water treatment facility laboratory; or an equivalent combination of experience and education with a minimum of four hours of microbiology.

Licenses and Certifications

- Massachusetts Driver's License – Class D (Required)
- Massachusetts Operator of Drinking Water Supply Facilities – Treatment 3 or Higher License (Highly Desirable)
- OSHA 10 and 30 Hour General Industry – (Required or ability to attain within one (1) year)

Knowledge, Ability and Skill

Knowledge

Knowledge of chemical and biological laboratory testing procedures, as applied to the operations of a conventional water treatment plant process control. Thorough knowledge of laboratory practices, tests, techniques, equipment, and terminology in the field of drinking water analysis. Applied knowledge of the current version of Standard Methods for the Examination of Water and Wastewater is necessary. Thorough knowledge of environmental laboratory safety procedures and guidelines.

Ability

Ability to work on own initiative and carry proper testing procedures. Ability to maintain well-organized and concise laboratory records to prepare reports. Ability to perform chemical and biological analysis

and general laboratory procedures. Ability to communicate with others orally and in writing. Ability to organize and maintain proper laboratory inventory. Ability to keep the laboratory clean, neat, and organized at all times. Ability to follow the Board's safety rules and guidelines.

Skills

Skills in performing sampling and laboratory analyses on water processes, water resources, distribution system, and other required samples. Must have effective communications skills when sampling within the cities. Must have strong computer skills, which include the use of Microsoft Office applications, perform database queries, and generate reports.

Physical Requirements

Constant moderate physical effort generally required to perform work. Frequent bending, walking, climbing, reaching, and standing. Occasionally required to lift and move containers and equipment weighing up to sixty (60) pounds. Sometimes works in confined areas for short periods of time or from an elevated height.

While performing the duties of this job, the employee may stand for entire shift, climb, balance, kneel, crouch, or crawl. Specific eyesight (sharp, close, distance, color, peripheral, and depth vision) and hearing well within or correctable to normal ranges are necessary for routine tasks.

Job Environment

Work within the plant is performed under typical water treatment laboratory conditions with potential conditions with exposure to heights, toxic or corrosive chemicals, fumes, or airborne particles. Work within the distributions systems and watershed is with direct contact with residents and businesses. Occasional exposure to outdoor weather conditions is required. Employee may be required to work varying hours outside their normal work hours, during an emergency and/or process control situation.

Operates laboratory equipment, automobile, light truck, hand tools, standard office equipment, and computers.

Has routine contact with other Board staff, general public, city and state officials, vendors, and consultants.

Performs routine responsible and administrative laboratory functions, requiring the exercise of responsible independent judgment.

Errors could result in incorrect laboratory analysis and create safety hazards, which could result in legal ramifications to the Board. Misuse of chemicals and other laboratory substances or equipment could result in personal injury and/or loss of life.

Adheres to the Board's safety rules, regulations, policies and procedures.

Supervises other laboratory related personnel as assigned.

Essential Functions

The essential functions or duties listed below are intended only as illustrations of the various types of work that may be performed. The omission of specific statements of duties does not exclude them from the position if the work is related, or a logical assignment to the position.

- Collects samples and conducts analysis of plant, distribution system and other resources for permit compliance and process control. Responds to customer questions, inquires, and complaints.
- Communicates as necessary with the Supervisor of Operations, Deputy Director, and other lab personnel to ensure that the laboratory is operating efficiently and effectively.
- Assists in the maintenance and execution of a laboratory safety program and a comprehensive Quality Assurance/Quality Control (QA/QC) program. Oversees, monitors, maintains, and reports on these programs regularly, as required.
- Generates laboratory reports. Assists in the management of a Quality Assurance/Quality Control program.
- Assists in the supervision and training of personnel in laboratory testing, in-house maintenance, and compliance with laboratory procedures if assigned.
- Assists in establishing a laboratory equipment maintenance and preventive maintenance program. Keeps accurate records as required.
- Assembles instruments and equipment for analytical or research work. Prepares chemical and bacteriological media, stains, reagents, and tests solutions routinely used in laboratory work.
- Operates equipment and conducts tests, as directed. Enters data electronically and manages data as required. Maintains clear and accurate test result records.
- Cleans, maintains, calibrates, and stores instruments and equipment. Recommends and assists with purchases to maintain laboratory inventory and maintain proper inventory levels of equipment and supplies. Performs custodial duties in the laboratory.
- Performs plant routine equipment and system operational inspections. Completes related inspection documentation. Communicates regularly with other employees to provide information or to assist in remedying problems.
- Assists with performing routine plant safety equipment and systems inspections and testing. Completes related safety documentation.
- Operates the treatment plant subject to holding a valid Grade T3 or T4 Plant Operators License and the qualifications and experience requirements.
- Attends and participates in meetings as assigned.
- Performs other duties as assigned.

Occupational Category Code: O4