

## **SENIOR LABORATORY TECHNICIAN**

**DISTINGUISHING FEATURES OF THE CLASS:** This is moderately difficult technical laboratory work involving responsibility for independently performing and/or supervising the chemical, physical, microbiological and bacteriological examination of such matter as water, sewage and industrial wastes, etc. The work involves the use of analytical thinking and a high degree of accuracy to resolve physical, chemical and bacteriological laboratory problems in accordance with prescribed procedures and general work instructions. Employees in this class work under direct supervision of a chemist or laboratory director with some leeway given in carrying out specific work assignments. Supervision may be exercised over the work of subordinate technical and clerical laboratory personnel.

### **TYPICAL WORK ACTIVITIES:** (Illustrative Only)

- Performs all types of physical, chemical, microbiological and bacteriological tests on such matter as raw, chemically treated and finished water;
- Conducts the more complex examinations and analyses of water;
- Performs research work on algae, trace elements and organic and inorganic elements as required;
- Prepares chemical reagents, solutions and other necessary test media;
- Maintains and supervises the recording and tabulation of test results and data for official use;
- Supervises operations of the laboratory, when necessary;
- Participates in studies and projects to improve the techniques and methods of water analysis, control and treatment;
- Assists in the standardization of new and/or changed methods and techniques;
- Prepares experimental and research equipment for use in special or critical studies;
- Operates and maintains various types of laboratory equipment to provide accurate testing environments and results;
- Provides technical advice to lower level laboratory personnel;
- Assists in the training of lower level laboratory personnel;
- Enters and retrieves information in an automated information system;
- Performs related work as required.

### **FULL PERFORMANCE KNOWLEDGE, SKILLS, ABILITIES AND PERSONAL CHARACTERISTICS:**

- Thorough knowledge of modern techniques, testing practices, principles, safety precautions, and terminology used in analysis, laboratory control and treatment of water;

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- Thorough knowledge of the principles of chemistry, bacteriology, microbiology and physics as they relate to laboratory analysis;
- Good knowledge of personal computers and office equipment;
- A high degree of technical skill in the operation and care of modern laboratory equipment and apparatus;
- Ability to perform all types of tests relating to water analysis and treatment;
- Ability to supervise and work with others;
- Ability to prepare detailed reports reflecting test results;
- Ability to understand and carry out instructions;
- Thoroughness;
- A high degree of accuracy;
- Visual acuity;
- Sound judgment;
- Dependability;
- Physical condition commensurate with the demands of the position.

**MINIMUM QUALIFICATIONS:**

- a) Graduation from a regionally accredited or NYS registered college or one accredited by the NYS Board of Regents to grant degrees with an Associate's Degree (or higher) in chemistry, bacteriology, microbiology or laboratory technology and one (1) year experience in a public health laboratory performing technical laboratory analysis of water or sewage or related laboratory analysis; **OR**
- b) Graduation from high school or possession of a high school equivalency diploma and three (3) years of paid fulltime experience in a public health laboratory performing technical laboratory procedures, or in the laboratory analysis of water or sewage; **OR**
- c) Any equivalent combination of training and experience as defined by the limits of (a) and (b) above.

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