## SENIOR LABORATORY TECHNICIAN (I-ENVIRONMENTAL SCIENCE)

<u>DISTINGUISHING FEATURES OF THE CLASS</u>: Under the direct supervision of professional laboratory personnel, an incumbent in this position performs chemical, physical and bacteriological tests of environmental samples and other products which involve the accurate completion of a variety of standardized tests and procedures in the discipline of Environmental Science. Responsibility includes preparing media, solutions and standards, as well as maintaining equipment in accordance with established procedures. An incumbent must maintain a satisfactory rating of performance by the New York State Department of Health for those procedures for which approval has been granted to the laboratory. Work is subject to shift assignment. Does related work as required.

## **EXAMPLES OF WORK:** (Illustrative Only)

Performs standardized bacteriological and/or chemical analyses of water, wastewater, estuarine samples, wipes and swabs, and other products including total and fecal coliform, standard plate count, microscopic examination of water, biochemical oxygen demand, chemical oxygen demand, ammonia nitrogen, detergents, nutrients, solids, etc.;

Prepares samples for analyses using standardized methods or under the direction of a chemist including: measuring, addition of required preservatives and reagents and prescribed treatment (i.e.; filtering, centrifuging, digestion, dilutions, etc.), air flow calibrations, absorber-oxidizer replacement, etc;

Performs various chemical, biochemical and bacteriological examinations as required;

Receives samples and updates the Computerized Laboratory Information Management System by logging all necessary data;

Performs prescribed procedures of quality control such as: daily log of pH meter standardizations, refrigerator and incubator temperatures, specific conductivities of distilled water and analytical balance weighings for precision and accuracy, standardizations of conductivity bridge, dissolved-oxygen meter, fluoride meter, etc., standard curves, spiked and duplicate samples, standardization of reagents, dyes and solutions, positive and negative controls, etc.;

Prepares media, solutions, reagents and equipment ensuring proper availability of work materials;

Maintains assigned work areas, instrumentation and equipment in a clean and safe manner and at operational readiness;

Participates in the New York State Department of Health proficiency testing programs in the assigned area of discipline;

Records results and makes reports of findings, insuring adherence to quality control standards:

Works overtime, holidays and weekends when required; SENIOR LABORATORY TECHNICIAN (I-ENVIRONMENTAL SCIENCE)

## EXAMPLES OF WORK: (Illustrative Only) (Cont'd.)

Uses computer applications or other automated systems such as spreadsheets, word processing, calendar, e-mail and database software in performing work assignments;

May be required to make telephone notification of results to water companies, government agencies and private individuals, all of which are logged, dated and initialed;

May perform other incidental tasks, as needed.

FULL PERFORMANCE KNOWLEDGE, SKILLS, ABILITIES AND ATTRIBUTES: Knowledge of environmental chemistry and environmental bacteriology laboratory techniques, procedures, and safety precautions; knowledge of the principles and practices of environmental science; knowledge of environmental laboratory terminology; skill in use, operation and care of laboratory instruments and equipment; ability to perform assigned tasks according to prescribed procedures; ability to make accurate observations and records of test results; ability to adapt techniques and procedures to special requirements and situations; ability to plan and schedule work phases; ability to follow detailed oral and written instructions; ability to read, write, speak, understand, and communicate in English sufficiently to perform the essential duties of the position; ability to use computer applications such as spreadsheets, word processing, e-mail and database software; alertness; initiative; integrity; accuracy; thoroughness; dependability; physical condition commensurate with the demands of the position.

MINIMUM ACCEPTABLE TRAINING AND EXPERIENCE: High school or equivalency diploma and either: (a) a Bachelor's Degree\* in one of the chemical, physical, biological or environmental sciences; or (b) a Bachelor's Degree\* which included at least twelve credits in one of the chemical or biological sciences and one year of laboratory experience and/or training in a recognized laboratory performing technical laboratory procedures in the field of environmental science; or (c) five years experience as stated in (b).

<u>SUBSTITUTION</u>: Satisfactory completion of 30 credits\* towards a Bachelor's Degree which included at least twelve credits in one of the chemical or biological sciences may be substituted on a year for year basis for up to four years of the experience required in (c).

\*SPECIAL NOTE: Education beyond the secondary level must be from an institution recognized or accredited by the Board of Regents of the New York State Education Department as a post-secondary, degree-granting institution.

<u>NOTE</u>: Unless otherwise noted, only experience gained after attaining the minimum education level indicated in the minimum qualifications will be considered in evaluating experience.

West. Co. J.C.: Non-Competitive

SAS51

Job Class Code: C1669

Job Group: VII