

**SANITARY CHEMIST**

**DISTINGUISHING FEATURES OF THE CLASS:** The work involves responsibility for maintaining required environmental and sanitary standards in the treatment of water or wastewater and for assisting in the determination of plant procedures which will produce the most efficient and effective results within plant design limitations. A Sanitary Chemist supervises and participates in the physical, chemical and bacteriological examination of water and/or wastewater. The work is performed under the general supervision of the Chief Operator with considerable leeway permitted for the exercise of independent judgment in carrying out the technical aspects of the work. Supervision may be exercised over the activities of subordinate laboratory personnel. Does related work as required.

**TYPICAL WORK ACTIVITIES:** *The typical work activities listed below, while providing representative examples of the variety of work assignments in the title, do not describe any individual position. Incumbents in this title may perform some or all of the following, as well as other related activities not described.*

Plans and supervises the regular collection and physical, chemical, bacteriological and microscopic examination of raw and treated water or wastewater for compliance with regulatory agency requirements and efficient plant operations;

Plans, assigns and reviews the work of subordinate laboratory personnel;

Performs more difficult and advanced physical, chemical, bacteriological and microscopic examinations of water and/or wastewater;

Instructs subordinates in proper laboratory procedures and in the care and use of laboratory equipment;

Reviews, analyzes, and interprets technical data and reports submitted by subordinates;

Oversees analytical program and develops appropriate improvements;

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Establishes sample collection locations as appropriate;

Supervises the calibration, operation, maintenance and repair of laboratory and automatic sampling equipment;

Conducts research and special studies to increase plant efficiency and to obtain improved results;

Confers regularly with the Chief Operator regarding ongoing operations and problems encountered;

Keeps informed on the latest developments in sanitary chemistry and microbiology by the study of professional literature;

Controls inventory of laboratory materials and supplies, requisitions needed additions and recommends budgetary requests for laboratory operation;

Keeps accurate records and assists Chief Operator in submitting required reports to Federal, State and local agencies;

Maintains quality control of all laboratory procedures according to Federal and State guidelines;

Confers with governmental officials, industry representatives, and other interested parties in regard to water and/or wastewater treatment matters;

Attends laboratory related courses, workshops, seminars, etc. and participates in in-service training of plant personnel.

**FULL PERFORMANCE KNOWLEDGES, SKILLS, ABILITIES, AND PERSONAL CHARAC-**

**TERISTICS:** Thorough knowledge of modern laboratory principles, practices, techniques, terminology, equipment and safety precautions; thorough knowledge of the modern practices, techniques, and equipment used in the physical, chemical, and bacteriological analysis of water and wastewater; a high degree of technical skill in the operation and care of modern laboratory

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equipment and apparatus; ability to plan for, train and supervise others in the methodology of Sanitary Chemist procedures; thoroughness; and accuracy.

**MINIMUM QUALIFICATIONS:** Either:

- (A) Graduation from a regionally accredited or New York State registered college or university with a Bachelor's Degree in Chemistry, Biology, Microbiology, Bacteriology, Laboratory or Medical Technology or a closely related field including or supplemented by a minimum of 24 credit hours in Chemistry and two (2) three-credit hour courses in Microbiology, at least one (1) of which shall have been general Microbiology and one (1) year of experience under supervision in environmental testing; or
- (B) Graduation from a regionally accredited or New York State registered college or university with an Associate's Degree in Chemistry, Biology, Microbiology, Bacteriology, Laboratory or Medical Technology or a closely related field including or supplemented by a minimum of 24 credit hours in Chemistry and two (2) three-credit hour courses in Microbiology, at least one (1) of which shall have been general Microbiology and three (3) years of experience under supervision in environmental testing; or
- (C) An equivalent combination of training and experience as defined by the limits of (A) and (B) above.

**NOTE:** Your degree or credits must have been awarded by a college or university accredited by a regional, national, or specialized agency recognized as an accrediting agency by the U.S. Department of Education/U.S. Secretary of Education. If your degree or credits were awarded by an educational institution outside of the United States and its territories, you must provide independent verification of equivalency. A list of acceptable companies who provide this service can be found on the Internet at: <https://www.cs.ny.gov/jobseeker/degrees.cfm>. You must pay the required evaluation fee.

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Last Reviewed:

Jurisdictional Class: Competitive

Public Hearing: N/A

NYS Civil Service Commission Approval: N/A

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