

Jurisdictional Class: Competitive
Adopted: March 16, 1992
Revised: August 20, 2010

WATER RESOURCE CHEMIST

DISTINGUISHING FEATURES OF THE CLASS: This is professional chemistry work involving responsibility for overseeing and performing detailed laboratory analyses of water, sewage, and industrial wastes, as part of a program to control water pollution and water quality. The work is performed under general direction of the Chief Water Treatment Plant Operator with leeway allowed for the exercise of independent judgment and work methods. Supervision is exercised over the work of subordinate laboratory personnel. The incumbent does related work as required.

TYPICAL WORK ACTIVITIES: (Illustrative only)

Leads in, organizes, and assigns a variety of chemical and bacteriological tests used in process control and monitoring of an activated sludge water pollution control plant;
Performs difficult and complex chemical and bacteriological examinations of sewage and industrial wastes;
Monitors test results and recommends improved operating procedures to sewage treatment plant personnel;
Oversees the collection of untreated and treated sewage and industrial waste samples from collection and discharge system;
Trains subordinate technical laboratory personnel in various organic, inorganic, biochemical, and chemical test procedures;
Performs the more complex physical, biochemical, organic, and inorganic chemical test procedures;
Oversees the collection of data and preparation of reports by subordinates and checks them for accuracy;
Devises methods and institutes procedures for the control and abatement of water pollution;
Conducts special tests and studies for the improvement of water quality and pollution control plant operations;
Prepares and maintains a wide variety of records and reports.

FULL PERFORMANCE KNOWLEDGE, SKILLS, ABILITIES & PERSONAL CHARACTERISTICS:

Good knowledge of modern laboratory practices, terminology, and safety precautions;
Good knowledge of the principles of analytic chemistry and bacteriology related to examination of water, sewage, industrial wastes, and other materials;
Good knowledge of practices governing the conduct of scientific laboratory tests;
High degree of skill in the operation and care of modern laboratory equipment and apparatus;
High degree of skill in the performance of difficult laboratory tests and routines;
Ability to direct and supervise the work of technicians in conducting chemical and bacteriological tests;
Ability to make accurate observations and records of test results;
Ability to understand and follow complex technical;
Sound professional judgment.

MINIMUM QUALIFICATIONS: Graduation from a regionally accredited or New York State registered college or university with a Bachelor's Degree with major emphasis in chemistry, bacteriology, or related field and one (1) year of experience in professional laboratory work involving sanitary chemistry; or an equivalent combination of training and experience as defined above.