

## **WASTEWATER FACILITIES CHEMIST/LABORATORY TECHNICAL DIRECTOR**

### **DISTINGUISHING FEATURES OF THE CLASS:**

This is highly technical work involving the responsibility for managing the operations of a certified wastewater laboratory under the guidelines of the National Laboratory Environmental Accreditation Program (NELAP). The work involves performing and supervising inorganic and organic, as well as bacteriological and bio toxicity analyses on wastewater for State Pollutant Discharge Elimination System (SPDES) testing parameters. The incumbent assists in the approval process of new wastestreams and aids in maintaining a current mailrail table. General supervision is received from the Wastewater Facilities Director. The incumbent trains, assigns, directs and monitors the work of laboratory personnel. The Wastewater Facilities Chemist/Laboratory Technical Director performs related work as required.

### **TYPICAL WORK ACTIVITIES:**

Performs and directs inorganic and organic sample preparation and instrumental analyses of samples using approved laboratory methods;  
Oversees the operation and routine maintenance of highly sophisticated analytical instrumentation such as gas chromatograph/mass spectrometer (GC/MS), Atomic Absorption Spectrophotometers and Auto Analyzers;  
Supervises the operation of a Laboratory Information System (LIMS) for sample and data record keeping;  
Performs and directs bacteriological and toxicity testing;  
Ensures required quality control procedures are met in order to obtain accurate, consistent, reliable qualitative and quantitative results;  
Performs and directs research projects for plant process control work as well as wastestream characterizations involving the identification and quantification of pollutants in industrial and environmental samples;  
Maintains records of all analytical work performed and prepares reports summarizing and interpreting the results.

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

Thorough knowledge of the principles and practices of inorganic and organic chemistry as applied to analytical laboratory analysis; good knowledge of the principles and practices of water and wastewater treatment; working knowledge of current computer software applications; working knowledge of current laboratory certification requirements of the National Environmental Laboratory Accreditation Program; ability to maintain modern analytical instrumentation and perform proper quality control procedures to produce legally defensible qualitative and quantitative analytical results; possession of managerial skills, leadership abilities, good communication skills and good judgment; physical condition commensurate with the demands of the position.

### **MINIMUM QUALIFICATIONS: EITHER**

- (A) Graduation from a regionally accredited or New York State registered college or university with a Master's Degree in Chemistry, Environmental Studies, Biology, Engineering or related field which included, or was supplemented by, 24 credit hours of coursework in chemistry and four (4) credit hours in general microbiology; and two (2) years of analytical laboratory experience performing environmental analyses; **OR**
- (B) Graduation from a regionally accredited or New York State registered college or university with a Bachelor's degree in Chemistry, Environmental Studies, Biology, Engineering or related field which included, or was supplemented by, 24 credit hours of coursework in chemistry and four (4) credit hours in general microbiology; and three (3) years of analytical laboratory experience performing environmental analyses.