DEPARTMENT: <u>NORTH TONAWANDA WASTEWATER</u>

CLASSIFICATION: <u>COMPETITIVE</u> APPROVED: <u>NOVEMBER 4, 2004</u>

## **SENIOR LABORATORY TECHNICIAN**

<u>DISTINGUISHING FEATURES OF THE CLASS</u>: The work involves responsibility for the physical, chemical, and microbiological examination of raw, process and final wastewater. The Senior Laboratory Technician participates in and supervises subordinate laboratory personnel in the completion of required tasks for the control and monitoring of the treatment system. The work is performed under the supervision of the Sanitary Chemist with leeway for exercising independent judgement for carrying out the details of the work. Consultative supervision may be exercised over the work of Wastewater Treatment employees, when working in the laboratory. Does related work as required.

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

- 1. Trains subordinate personnel in newly adopted analysis techniques;
- 2. Performs a wide variety of more difficult and advanced chemical, physical and microbiological analysis used in controlling Wastewater Treatment Plant operation and processes to assure compliance with current Federal and State regulations and permits;
- 3. Supervises the operation and maintenance of, and operates scientific equipment used in advanced wastewater analysis such as but not limited to gas chromatographs, gas chromatograph/mass spectrometer, atomic absorption spectrophotometer, graphite furnace, Total and Organic Carbon analyzer, Infra-Red spectrophotometer and various sample introduction systems;
- 4. Personally collects or supervises the collection of raw, process and treated samples at the wastewater plant and sewerage system (Industrial Pretreatment Program);
- 5. Coordinates with the Sanitary Chemist to maintain adequate materials and supplies for laboratory programs, assists in preparing budget recommendations and supply requests;
- 6. Assists the Sanitary Chemist in establishing implementing and review of required laboratory quality control programs for sampling, analysis, preparation of samples, reagents and media;
- 7. Supervises and reviews the collection of laboratory data and the maintenance of records in compliance with applicable Federal and State regulations;
- 8. May conduct special studies and tests to improve wastewater treatment processes with the direction of the Sanitary Chemist;
- 9. Assists the Sanitary Chemist in submitting required reports to State, Fderal or local agencies;
- 10. Attends seminars and workshops applicable to increase job knowledge and proficiency.

FULL PERFORMANCE KNOWLEDGE, SKILLS, ABILITIES AND PERSONAL CHARACTERISTICS: Good knowledge of modern laboratory techniques, practices, equipment, safety precautions and terminology used in the analyses of wastewater; good knowledge of the principles of biology, chemistry, microbiology, bacteriology and physics as they relate to wastewater analysis; good knowledge of the principles of environmental health as they relate to wastewater analysis; skill in the operation and care of modern laboratory equipment and apparatus; ability to understand and direct technical oral and written directions; ability to supervise and work with others; ability to prepare and maintain technical records and reports; accuracy; thoroughness; good judgment; dependability; physical condition commensurate with the demands of the position.

## **MINIMUM QUALIFICATIONS:**

Graduation from a regionally accredited college or university or one accredited by the New York State Board of Regents to grant degrees with an associate's degree in chemistry, biology, bacteriology, microbiology, laboratory technology, or related science field with a minimum of eight (8) credit hours in a science field (i.e. chemistry, biology, etc.) **and** two (2) years experience in a public or private laboratory; **or** 

Graduation from high school or possession of a high school equivalency diploma **and** four (4) years of experience in a public or private laboratory performing technical duties.