DISTINGUISHING FEATURES OF THE CLASS

The work involves responsibility for performing professional sanitary engineering work in the operation and maintenance of county wastewater treatment plants, industrial waste pretreatment, sewer conveyances and water quality monitoring. An employee in this class receives assignments requiring the application of professional engineering skills and knowledge to sanitary engineering projects. The employee may be responsible for providing technical assistance for the operation and maintenance of wastewater treatment plants, industrial waste pretreatment, sewer infrastructure and/or water quality monitoring. The employee may be responsible for acting as the department's representative when dealing with projects that require working with consulting engineers, regulatory agencies or non-profit organizations. Assignments are received with general instructions, but employees are to use their own judgment and initiative to carry them through completion. Supervision is exercised over subordinate Sanitary Engineers. Supervision is received from an administrative superior with work reviewed through completion. Certain assignments made to an employee in this class will require reasonable access to transportation to meet field work requirements made in the ordinary course of business in a timely and efficient manner. Does related work as required.

TYPICAL WORK ACTIVITIES

Assists in and provides specific direction and general guidance in project development and implementation, to include: development, issuance and review of Request for Proposals; administration of engineering design contracts; final review of plans and specifications; public participation efforts; and other duties as may relate to the design and implementation of the department’s capital projects.

Acts as technical consultant in the operation of wastewater treatment plants and wastewater conveyances and design thereof.

Develops and implements water quality monitoring programs.

Assists in the administration of the industrial waste pretreatment program or flow/flood control program.

Coordinates and assists in the administration of federal and state regulatory program requirements for the operation and maintenance of county wastewater treatment plants and sewer conveyances.

Evaluates various equipment and processes for applications at the wastewater treatment plants, industrial waste pretreatment program or water quality monitoring programs.

Assists in the design and supervision of wastewater treatment facility construction.

Assists in establishing and oversees the process control procedures for the operation of a wastewater treatment plant.

Manages and directs inflow/infiltration reduction and capacity assurance efforts in conformance with the requirements of the U.S. Environmental Protection Agency and N.Y.S. Department of Environmental Conservation Capacity, Management, Operations and Maintenance (CMOM) programs.

Reviews municipal satellite project submittals in accordance with the department’s administrative and engineering standards requirements.

Prioritizes, schedules and coordinates engineering field support activities for flow and flood control operation and maintenance sections.
Reviews, develops and updates standard operating procedures for Process Control Division, Flow Control Division or Engineering and Laboratory Services Division. Develops, coordinates and updates Capital Improvement Plan. Assists administrative officers as a professional consultant. Acts as project manager for studies and projects performed by the department. Coordinates the State Pollution Discharge Elimination System compliance through permit review and discharge monitoring reports. Supervises subordinate sanitary engineering staff. Acts as the department's representative for projects that require working with outside consulting engineers, regulatory agencies or non-profit organizations. Prepares bid documents and specifications for chemical service contracts related to wastewater treatment operations and maintenance.

FULL PERFORMANCE KNOWLEDGES, SKILLS, ABILITIES AND PERSONAL CHARACTERISTICS

Comprehensive knowledge of the principles, practices and techniques of sanitary engineering. Comprehensive knowledge of the design and construction of public wastewater facilities. Thorough knowledge of modern development, current literature and sources of information regarding the sanitary engineering field. Thorough knowledge of federal and state rules and regulations relative to water pollution control activities. Good knowledge of the principles and practices of industrial waste monitoring and pretreatment. Good knowledge of the principles and practices of water quality monitoring and modeling. Ability to make difficult technical computations and to compile engineering data from raw figures. Ability to direct and coordinate the work of subordinates. Ability to make accurate evaluations of wastewater system efficiency and analysis of varied source data. Ability to communicate effectively both orally and in writing and to prepare technical reports.

MINIMUM QUALIFICATIONS

Promotion: Two (2) years of permanent competitive class status in the title of Sanitary Engineer II.

Open Competitive:
A) Graduation from a regionally accredited college or university or one accredited by the New York State Board of Regents to grant degrees with a baccalaureate degree in chemical, civil, sanitary, or environmental engineering, and three (3) years of professional level engineering work experience, or its part–time equivalent, related to wastewater treatment or water pollution control; or,
B) Graduation from a regionally accredited college or university or one accredited by the New York State Board of Regents to grant degrees with a baccalaureate degree in chemistry, biology, physics or environmental science and four (4) years of technical or professional level engineering work experience, or its part–time equivalent, related to wastewater treatment or water pollution control, two (2) years of which must have been in a professional level capacity in engineering related to wastewater treatment or water pollution control; or,
C) An equivalent combination of training and experience as defined by the limits of (A) and (B).

NOTE: Graduation from a regionally accredited college or university or one accredited by the New York State Board of Regents to grant degrees with a master's degree in engineering...
and/or science as defined above may be substituted for work experience as follows:
Thirty (30) semester credit hours equals one (1) year of work experience.
Sixty (60) semester credit hours equals two (2) years of work experience.

7/09 Revised