

ENGINEER II (SEWERS)

DISTINGUISHING FEATURES OF THE CLASS: This technical public works engineering of a complex nature which may be performed in the field or office as assignments require and which involves a responsibility for either the industrial wastewater pretreatment program or the maintenance of the structure and equipment used in the Rockland County Sewer District. The latter is also involved in the inspection and monitoring of construction projects involving sewers. The work is performed under the general direction of a higher-level administrator and work guidance (e.g., lead work) may be exercised over lower level technical and clerical employees. Does related work as required.

TYPICAL WORK ACTIVITIES:

When involved in the industrial wastewater pretreatment program:

Reviews plans, specifications and connection applications for engineering and technical compliance with District regulations and procedures;
Processes and issues permits to businesses which want to discharge waste into sewers;
Meets with business representatives to explain regulations, examine equipment used and to encourage a commitment to environmental protection and pollution control;
Conducts investigations to ensure compliance with discharge regulations by looking at process used, taking samples at manholes and analyzing same in the laboratory;
Conducts inflow infiltration surveys at private homes looking for illegal connections and explaining corrections and prepares specifications for construction or modifications of pipelines;
Does smoke testing looking for leaks in manholes;
Inspects pump stations and identifies mechanical and hydraulic problems as appropriate;
Answers questions from the public regarding interceptor sewers and laws governing the discharge of wastes.

When involved in structure and equipment maintenance and construction of sewers and sewer lines:

Acts as a technical resource for the equipment maintenance staff by developing preventative maintenance programs, troubleshooting recurring problems, and reviewing equipment such as pumps, motors, valves, flowmeters and related equipment used to transport or treat sanitary sewage for suitability;
Inspects construction projects involving sewers and monitors the construction of sewer lines, force mains, pumping stations and other projects;
Inspects sanitary sewer building tie-ins and subdivision sewerage systems;
Reviews plans and specifications for subdivision and non-residential sewer construction for compliance with Sewer District regulation and EPA grant conditions;
Writes technical specifications for Sewer District contracts and reviews bids received and recommends awards of bids;
Designs structural and equipment modifications as needed to improve the operation of collection system and treatment plant;
Responds to emergency calls as required and supervises emergency repair work;
Directs emergency response operations;
Performs special technical projects as required;
Prepares and submits monthly, quarterly and annual performance reports as required by various State, local and Federal rules and regulations.

FULL PERFORMANCE KNOWLEDGE, SKILLS, ABILITIES AND PERSONAL CHARACTERISTICS:

Good knowledge of the principles, practices and terminology in engineering; good knowledge of physics and mathematics; familiarity with laws and regulations governing wastewater treatment; ability to prepare and interpret engineering plans and specifications.

MINIMUM QUALIFICATIONS: A Bachelor's degree in Engineering and two (2) years of post-degree engineering experience, one (1) year of experience of which involved the design and construction management* of wastewater treatment plants, sewer lines, pumping stations, and/or related facilities.

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*Construction management is defined as the oversight of construction in order to ensure adherence to design requirements by performing one or more of the following as a substantial portion of the work: reviewing shop drawings, attending/running job meetings, performing field inspections, supervising inspectors, documenting work progress, approving field changes, processing change orders and processing periodic payments.

NOTE: A Master's degree in Engineering may be substituted for one (1) year of required experience.