

SENIOR ENGINEER
(WATER BOARD)

DISTINGUISHING FEATURES OF THE CLASS: This position exists at the Upper Mohawk Valley Regional Water Board, and involves performance of professional work in the design, planning, investigation, control, maintenance, construction, management and operation of engineering projects in the distribution system, filtration plant, and other Water Board sites. The work also involves supervision of varying numbers of employees, by laying out tasks, giving instructions regarding procedures, and making such checks on completion of work as are necessary to ensure proper performance. Technical policy matters, work status and progress of projects are reviewed with, and must have the approval of, the Principal Engineer to ensure compliance with standards. In the absence of the Principal Engineer, the incumbent is designated the leading engineer for the department. Supervision is exercised over subordinate engineering personnel. Does related work as required.

TYPICAL WORK ACTIVITIES: (Illustrative Only)

Prepares and executes programs to ensure compliance with requirements of existing and new DOH/EPA/DEC rules, regulations and permits;
Recommends modifications to raw water treatment techniques and chemicals, as well as, construction of facilities and installation of equipment to meet new standards;
Prepares plans, specifications and contracts for water distribution and filtration construction projects;
Assigns and supervises field and office work of engineering subordinates;
Supervises the design, construction and installation of water mains, ancillary facilities and water filtration processes;
Conducts long-range studies to determine future additions to water systems and filtration processes;
Reviews planned alterations and construction for structural safety, design adequacy and optimum economics;
Oversees the preparation of engineering estimates, plans and profiles;
Estimates costs of construction of various phases of water systems and filtration facilities;
Evaluates performance of water treatment operators and processes to ensure compliance with contracts and DOH/DEC standards;
Oversees issuance of construction and other permits;
Prepares reports on activities and projects in a timely manner;
Performs weekly inspections of the filtration plant facility;
Assists in budget preparation activities.

FULL PERFORMANCE KNOWLEDGE, SKILLS, ABILITIES AND PERSONAL CHARACTERISTICS: Thorough knowledge of the principles and practices of hydraulic engineering, as it relates to the design, construction, operation and maintenance of a municipal water supply and distribution system; good knowledge of structural engineering, as it applies to the operation, construction and maintenance of conduits, mains, pumping stations, reservoirs and other fixtures and equipment used in water supply and distribution systems; good knowledge of the principles and procedures of water treatment; a high degree of skill in the application of professional knowledge to engineering projects; skill in coordinating and applying engineering research in preparing reports of studies; ability to perform technical research work and to give appropriate advice on difficult engineering problems; ability to supervise and manage engineering programs and subordinates engaged in various projects; initiative and resourcefulness in the solution of complex engineering problems.

MINIMUM QUALIFICATIONS: Either:

- (A) Possession of a Master Degree in civil, environmental or sanitary engineering, or a closely related field, from a regionally accredited or New York State registered college or university **AND** two (2) years of engineering experience; **OR**
- (B) Graduation from a regionally accredited or New York State registered college or university with a Bachelor Degree in civil, environmental or sanitary engineering, or a closely related field, **AND** four (4) years of engineering experience; **OR**
- (C) An equivalent combination of training and experience, as defined by the limits of (A) and (B) above.