## ASSISTANT ENGINEER (PUBLIC HEALTH)

DISTINGUISHING FEATURES OF THE CLASS: Under general supervision, an incumbent in this class performs public health engineering work relating to wastewater disposal, sanitary sewage systems, individual water supplies, air pollution and solid and hazardous wastes to ensure compliance with Westchester County, New York State Departments of Health and Environmental Conservation regulations for the protection of the public and the environment. An incumbent applies engineering principles for the detection, evaluation, control and management of those factors in the environment which influence public health. The incumbent reviews and evaluates applications for proposed wastewater or water system projects and plans for subdivision of land parcels, inspects sites to verify compliance with related codes, investigates and monitors public health issues relating to land development programs, prepares written reports of investigative findings and consults with numerous professionals and regulatory agencies to coordinate project efforts. This is the full-performance level of the Engineering series where incumbents are expected to use independent judgment in performing work on projects of considerable size or on several smaller projects. This classification differs from the higher level Senior Engineer level in that incumbents in that title are responsible for a broader scope of work, directing and reviewing the work of lower-level engineering staff, and the requirement to possess a Professional Engineer's license. While supervision is not a responsibility of this class, incumbents provide guidance to technical, maintenance and support staff as required. Does related work as required.

## **EXAMPLES OF WORK**: (Illustrative Only)

Conducts on-site inspections and investigations of public water supplies, sewage systems, public and individual wastewater disposal systems, major pollution sources, and solid and hazardous waste sources to verify conformity with local and state regulations, permits, plans and guidelines;

Reviews residential, commercial and industrial water supplies, wastewater disposal systems, and air pollution control systems to ensure conformance with related regulations and to advise on soil characterization, drainage ability, topography and usable area feasibility;

Reviews and evaluates projects, plans and proposals to determine if designs satisfy regulatory standards to protect the public and environment;

Prepares written engineering reports outlining investigative findings, recommendations and engineering calculations and criteria;

Investigates public health hazard complaints (i.e., sewer main breaks, sewer overflows, unpermitted air pollution sources, waste disposal procedures) and prepares inspection reports of findings;

Issues notices-of-violations for non-complying parties and provides expert testimonies as required;

Interprets chemical and bacteriological results of water, sewage, industrial, solid and hazardous waste examinations and air emissions;

Instructs local plant operators in water and sewage chemistry and bacteriology as applied in controlling the operations of water works and sewage treatment plants;

## EXAMPLES OF WORK: (Cont'd)

Assists municipalities and industries in organizing surveys relating to environmental health matters;

Uses computer applications or other automated systems such as spreadsheets, word processing, calendar and database software in performing work assignments;

May perform other incidental tasks, as needed.

FULL PERFORMANCE KNOWLEDGE, SKILLS, ABILITIES AND ATTRIBUTES: Good knowledge of the principles, practices and techniques of public health engineering and environmental health relating to air pollution, water supplies and purification, solid waste, sewerage and sewerage treatment and disposal, stream pollution, swimming pools, bathing beaches, realty subdivisions, housing, general sanitation and public health nuisances; knowledge of the provisions of the Public Health Law, New York State Sanitary Code and Environmental Conservation Law; ability to prepare effective reports and correspondence; ability to deal effectively with the public and officials, ability to use computer applications or other automated systems such as spreadsheets, word processing, and database software; ability to read, write, speak, understand and communicate in English sufficiently to perform the essential tasks of the position; willingness to work outdoors; initiative and resourcefulness in solving public health engineering problems; sound professional judgment; tact; physical condition commensurate with the demands of the position.

MINIMUM ACCEPTABLE TRAINING AND EXPERIENCE: A Bachelor's Degree\* in Engineering and two years of experience where a primary function of the positon was engineering in a public health, sanitary, environmental or chemical field.

<u>SUBSTITUTION</u>: (1) Current recognition as a Public Health Engineer Trainee or Junior Engineer by a state or political subdivision of the United States may be substituted for one year of the required experience. (2) Thirty credits toward a Master's Degree\* in Public Health Engineering, Sanitary Engineering, Environmental Engineering, Chemical Engineering, Mechanical Engineering, Public Health or Civil Engineering with a sanitary option such as Environmental Engineering or Public Health, may be substituted for two years of the required experience.

<u>SPECIAL REQUIREMENTS:</u> Possession of a valid license to operate a motor vehicle in the State of New York will be required at time of appointment and maintain same while in the title.

\*SPECIAL NOTE: Education beyond the secondary level must be from an institution recognized or accredited by the Board of Regents of the New York State Education Department as a post-secondary, degree-granting institution.

West. Co. J. C.: Competitive

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Job Class Code: C0108

Job Group: XII