

Public Health Engineer Tompkins County

Department: Health Department

Classification: Competitive

Labor Grade: White Collar Grade 16

Approved: 02/1981

Revised: 2/81; 3/88; 5/91; 7/93; 7/95; 8/95; 4/97; 8/03; 9/08; 4/17

By: HH, Commissioner of Personnel

MINIMUM QUALIFICATIONS

- (a) Graduation from a ABET/EAC accredited four year college or university with a Bachelors Degree in Engineering **AND** four years full-time paid (or the equivalent part-time) experience in engineering or in a public health related field; **OR**
- (b) Graduation from a regionally accredited or New York State registered four year college or university with a Bachelors Degree in Architecture or Technology **AND** eight years full-time paid (or the equivalent part-time) experience in engineering or in a public health related field; **OR**
- (c) Graduation from a regionally accredited or New York State registered two year college or university with an Associate's Degree in Engineering Technology **AND** ten years full-time paid (or the equivalent part-time) experience in engineering or in a public health related field; **OR**
- (d) Any combination of training and experience equal to or greater than that specified in (a), (b) and (c) above.

Tompkins County is Committed to Equity and Inclusion. We encourage those with similar values to apply.

SPECIAL REQUIRMENTS:

The candidate must meet the qualifications outlined above in order to be eligible for a New York State Professional Engineer's license **AND** must obtain a New York State Professional Engineering license within one year from the date of hire. The employee must thereafter maintain New York State Professional Engineer licensure for the duration of employment.

The candidate must possess a valid driver's license at the time of application and obtain a New York State Class D driver's license within one month from the date of appointment. The employee must maintain a valid New York State driver's license for the duration of employment.

NOTE:

Knowledge of and/or experience working with Computer Aided Design (CAD) software (BRICSCad preferred) is highly desirable. If you possess such education and/or experience, please outline this information in your application, cover letter or résumé.

DISTINGUISHING FEATURES OF THE CLASS:

This position exists in the County Health Department, Division of Environmental Health, and has responsibility for planning, administration and performance of one or more environmental health programs. The work entails reviewing and approving under his/her Professional Engineering license of engineering designs and projects to ensure the safeguarding of life, health and/or property; advising public officials or individuals on problems requiring professional public health engineering expertise, including measures for improvement and compliance with legal requirements and promoting public health through the application of environmental health practices; assisting in the enforcement of the local and state laws including the New York State and Tompkins County Sanitary Codes and other rules and regulations; and investigation of related conditions and matters. A high level of interpersonal skills are necessary in order to persuade, motivate or influence others under tense conditions or to present/defend matters involving sharp disagreement. Internal contacts are across divisions within the department and require professional collaboration on overlapping work projects and issues. External contacts are with professional associates and liaisons, builders, the community in general and involve the administration of specific Environmental Health programs. The work is performed under general supervision of the Director of Environmental Health, exercising considerable autonomy and independent judgment when carrying out details of the work. The Public Health Engineer has final review and responsibility for

all Division activities requiring a Professional Engineer's license and will supervise projects from conceptual meetings through approval and construction under the authority of a Professional Engineer's license to safeguard life, health and/or property.

Supervision is exercised over a work group and the incumbent is responsible for the technical and engineering quality of work of assigned public health personnel. The incumbent will perform all related duties as required.

TYPICAL WORK ACTIVITIES:

- Supervises and administers one or more programs such as residential Realty Subdivisions, Hazardous Waste Site Investigations, Onsite Wastewater Treatment Systems (OWTS), Indoor Air Complaints, Municipal Public Water Systems, Emergency Spill Response, etc.;
- Responsible for and supervises the technical quality of work of Public Health Sanitarians designing OWTS for individual residences and similar properties and issues OWTS Permits under his/her Professional Engineering license;
- Supervises State Pollution Discharge Elimination System permit process for sewage systems and ensures all Division permits meet New York State Department of Environmental Conservation requirements;
- Investigates and may take the lead role in developing public health concerns on emerging issues;
- Develops program goals and objectives, evaluates and reports on program progress, advises the Director of Environmental Health on program policy and priorities;
- In the course of administering program duties, supervises other Public Health staff such as providing training,
- assigning duties and reviewing the quality and quantity of work;
- Inspects, evaluates and reports on public and private water systems, sewage systems, swimming and bathing places, stream pollution, temporary residences, mobile home parks, hazardous waste sites, spills of hazardous materials, and other public health regulated facilities and nuisances, suitability of soil for sewage treatment, and development proposals;
- Makes engineering evaluations and prepares engineering reports about disease outbreaks, public health and environmental hazards and nuisances, suitability of soil for sewage treatment, and development proposals;
- Maintains relationships and cooperates with state and federal agencies whose work or policies affect environmental health programs;
- Aids in developing public health engineering and environmental health policies and procedures;
- Represents the Department in meetings and enforcement proceedings including giving testimony at hearings;
- Collects environmental samples of water, food, paint, soil, etc., prepares them for laboratory analysis and interprets laboratory results for other staff and the public;
- Performs deep and shallow soil tests in the field to determine soil type, permeability, restrictions for use as sewage systems;
- Performs engineering reviews and may issue approvals of engineering or architectural plans and specifications submitted to the Division for water and sewage systems, temporary residences, swimming and bathing facilities, realty subdivisions, and related programs;
- Provides advice and assistance on public health engineering matters to consulting engineers, local officials and the public;
- Represents the Division in meetings, enforcement proceedings, and public contacts; and
- Provides advice and training to other staff members and the public about public health policies, practices, and engineering matters.

KNOWLEDGE, SKILLS, ABILITIES AND PERSONAL CHARACTERISTICS:

- Thorough knowledge of the principles, practices and techniques of public health engineering and environmental health related to water supplies and purification, wastewater treatment systems, subdivisions and other developments, water pollution, air pollution, solid waste control, swimming pools and bathing beaches, indoor air, chemical and oil spills, etc.;
- Good knowledge of the Public Health Laws, and State and County Sanitary Codes relating to the activities of the division;
- Good knowledge of computer-aided design software applications;
- Working knowledge of basic computer applications (word processing, data management, spreadsheet);
- Skill in public health engineering techniques and practices;
- Ability to plan, develop, direct, and administer one or more public health programs;
- Ability to prepare reports and correspondence;
- Ability to plan and supervise the work of others;
- Ability to develop and maintain good public relations in difficult and controversial situations; and

- The employee's physical and mental condition shall be commensurate with the demands of the position, either with or without reasonable accommodation.

PHYSICAL, MENTAL AND ENVIRONMENTAL:

Physical: This position entails a combination of physical and sedentary activities. When in the field the employee will perform inspections of public and private water systems, sewage systems, swimming and bathing places, stream pollution, temporary residences, mobile home parks, hazardous waste sites, spills of hazardous materials, and other public health regulated facilities and nuisances, suitability of soil for sewage treatment. This work requires moderate physical effort such as periods of standing, walking, bending, climbing. The office component entails a minimal amount of walking, bending, standing, etc. There may be considerable visual effort involved, and repetitive hand/finger movements associated with the execution of the tasks delegated with this role. The incumbent must be able to accurately manage and manipulate information, using computer software and hardware systems, with or without reasonable accommodations. Machines, tools, instruments and equipment typically require considerable precision, manual dexterity and/or knowledge and skill.

Mental: The employee's ability to communicate (verbal or written) must be sufficiently adequate to enable them to understand and carry out detailed instructions. The work normally involves considerable demands from unpredictable fluctuations in work volume, frequent interruptions, regular changes in work priority, the tight and conflicting deadlines. The employee must possess the knowledge and ability needed to utilize office equipment, including computer systems, inclusive of necessary software and operating systems, with or without reasonable accommodations.

Environmental: The work occasionally has moderate exposure to disagreeable outdoor conditions such as weather, mud, rain, snow, construction sites/debris, etc. Working partially outdoors and around construction sites, there is considerable risk of moderate and some risk of serious injury.

Originally created 02/1981

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