

PRODUCTION ENGINEER

Code No.: 4-18-323
COMPETITIVE

DISTINGUISHING FEATURES OF THE CLASS: This is a staff engineering position in the Monroe County Water Authority responsible for the operation, construction and maintenance of water treatment, pumping and storage facilities. Duties include design, material specification, equipment analysis, budgeting, and environmental compliance functions relating to public water supply. Duties also include regular inspection of areas within the treatment plant and offsite locations including booster pumping stations, tanks and reservoirs, and involves physical activity such as entering confined or restricted spaces, working in tight quarters around machinery, and ascending heights. The employee reports directly to, and works under the general supervision of a senior level technical or administrative staff member, with considerable leeway allowed for the exercise of independent judgment. General supervision is exercised over laboratory personnel. Does related work as required.

TYPICAL WORK ACTIVITIES: (All need not be performed in a given position. Other related activities may be performed although not listed.)

Consults with administrators regarding methods and procedures for plant operations and construction and other matters;

Develops required reports, environmental assessments, and permits as directed;

Conducts field inspections of repair and maintenance activities of pumping and treatment facilities;

Supervises quality control laboratory;

Plans and designs pumping stations to determine maximum efficiency and the review of other costs, as directed;

Processes applications for plans and designs of water treatment plants to ensure production of a sufficient quantity and satisfactory quality of water, as directed;

Plans and designs preventive maintenance programs for pumping, purification, storage facilities and structures, as directed;

Assesses safety issues and develops appropriate safety programs and employee training for the unit consistent with Occupational Safety and Health Administration (OSHA) regulation and good safety practices;

Consults with the Director of Production and Transmission, Chemist, and other staff regarding proper application of treatment techniques and equipment;

Reviews results of construction bids;

Develops new and improved methods of water treatment, pumping, and pressure regulation;

Instructs personnel in the operation and maintenance of equipment and in new methods and techniques of operation;

Assists in the preparation of construction and operating budgets for the department.

FULL PERFORMANCE KNOWLEDGES, SKILLS, ABILITIES AND PERSONAL CHARACTERISTICS: Thorough knowledge of modern principles and practices of water pumping and treatment plant construction and operation; thorough knowledge of applicable state and federal regulations governing the water supply industry; good knowledge of the principles of sanitary, electrical and mechanical engineering as they relate to water production; good knowledge of the materials and equipment used in large scale water treatment and pumping operations; ability to train employees in new methods and techniques; ability to prepare designs of pumping and treatment plant facilities, auxiliary services and preventive maintenance programs; ability to plan and design pumping and treatment plant facilities to determine cost efficiency; ability to communicate effectively both orally and in writing; good judgment; physical condition commensurate with the demands of the position.

MINIMUM QUALIFICATIONS: Graduation from a regionally accredited or New York State registered college or

university with a Bachelor's degree in Electrical, Mechanical, Civil Engineering, or Construction Engineering, or a closely related field plus four (4) years paid full-time or its part-time equivalent engineering experience including one or more of the following: design, review, inspection, construction, or operations of public water supply facilities.

SPECIAL REQUIREMENTS: Possession of a Grade IA Water Treatment Operator's Certificate issued by the New York State Health Department at the time of appointment.

If you are appointed, you will be required to have a valid license to operate a motor vehicle in New York State or otherwise demonstrate your capacity to meet the transportation needs of the position.

Monroe County Civil Service Commission

ADOPTED: April 19, 1990

REVISED: April 15, 1993

REVISED: October 4, 2012

REVISED: May 6, 2021