

WATER SYSTEM ANALYST

Code No.: 6-23-009
COMPETITIVE

DISTINGUISHING FEATURES OF THE CLASS: This is a technical engineering position responsible for analyzing distribution system hydraulics by preparing, calibrating, and operating computer models of water supply and treatment systems and interpreting the results. The position assists with system planning and assessing operational efficiency. The employee reports directly to and works under the general supervision of a higher-level staff member. The employee may also supervise other technical and operations staff. 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.):

Prepares, calibrates and operates computer models of the water system and interprets results;

Collects, organizes and manipulates distribution system data from SCADA, and transfers data to spreadsheets;

Conducts field and pilot testing;

Calculates fire flows based on test data;

Prepares simple designs for water system appurtenances;

Troubleshoots hydraulic problems in the distribution system;

Identifies hydraulically deficient mains using models;

Assists with training distribution system operators;

Assists with distribution system operation and monitoring during emergency situations;

Obtains easements for property owners and answers common questions about construction procedures, easement payments, etc;

Assists in preparing long-term planning studies, population and demand projections, historical trends, etc;

Obtains and analyzes data from various sources and prepares written reports;

Calculates energy usage and costs of plumbing;

Conducts or assists with special studies and projects.

FULL PERFORMANCE KNOWLEDGES, SKILLS, ABILITIES AND PERSONAL CHARACTERISTICS: Good knowledge of the principles of distribution system hydraulics and operation; good knowledge of head loss calculations, pumps, motors, and pump curves; good knowledge of pressure zones and pumping schemes; good knowledge of flow measurement methods; ability to conduct engineering studies; ability to understand, interpret and analyze technical data; ability to organize material and prepare written reports; ability to use and create computer spreadsheets, word processing and database programs; ability to conduct hydraulic distribution flow tests; willingness to work outdoors; good oral and written communication skills; dependability ; good judgement; integrity, tact and courtesy; physical condition commensurate with the demands of the position.

MINIMUM QUALIFICATIONS: EITHER:

- (A) Graduation from a regionally accredited or New York State registered college or university with an Associate's degree in Engineering or Environmental Science, plus four (4) years of paid full-time or its part-time equivalent experience in environmental engineering or environmental analysis; OR,
- (B) Graduation from a regionally accredited or New York State registered college or university with a Bachelor's degree in Engineering or Environmental Science, plus two (2) years of experience as defined in (A) above; OR,
- (C) Any equivalent combination of training and experience as defined by the limits of (A) and (B) above.

SPECIAL REQUIREMENTS: Depending on the position duties, candidates for employment with Monroe County Government will be required to pass a pre-employment drug test.

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 job.

SPECIAL REQUIREMENT FOR APPOINTMENT IN SCHOOL DISTRICTS AND BOCES:

Per Chapter 180 of the Laws of 2000, and by Regulations of the Commissioner of Education, to be employed in a position designated by a school district or BOCES as involving direct contact with students, a clearance for employment from the State Education Department is required.

ADOPTED: March 7, 2002