



DETROIT WATER AND SEWERAGE DEPARTMENT

JOB POSTING

735 Randolph - Suite 2000
DETROIT, MI 48226

OPEN COMPETITIVE

Please read entire document before starting your application

Job Category: Technician
Title: Systems Technician
Minimum Salary: \$32,412
Open Date: May 8, 2015

Recruitment Unit: Water Supply Operations
Vacancies: 2
Maximum Salary: \$70,500
Close Date: Open Until Filled

GENERAL SUMMARY:

The Systems Technician controls and regulates activities in the pumping and electrical systems; operates real-time computerized process control equipment to monitor and control a water distribution and/or wastewater collection system.

REQUIRED EDUCATION AND EXPERIENCE (position requirements at entry)

- Associate's degree in science, chemistry, chemical engineering or a related field
- Completion of coursework in electricity, hydraulics and pneumatics preferred
- Previous experience in a utility based environment preferred
- Michigan S4 license within two (2) years of Level 1 designation
- Qualified for Water Technician or Plant Technician Level 3
- Meet all of the requirements to advance to Systems Technician Level 2 within five (5) years from date of obtaining Michigan S4 license

ESSENTIAL JOB FUNCTIONS

(Illustrative only, may not include all of the duties listed nor do the listed examples include all of the tasks that may be performed)

- Monitor gauges measuring pump, vacuum, instrument and service air pressure, hydraulics; suction and discharge elevation; reservoir and weir elevation, and discharge valve positioning; and troubleshoot problems.
- Direct startup and stopping of pumps in accordance with the load demand.
- Vary pump rates in accordance with demands of distribution and treatment operations.
- Perform minor repairs to equipment, request repair and generate work orders for maintenance service as needed.
- React to emergency situation and notify the appropriate personnel immediately of emergency situation and obtain necessary assistance.
- Coordinate control systems functions with other systems operations staff.
- Apply the capabilities, application, policies, procedures and protocol of process control system administration.
- Set up process control console and peripheral units in accordance with instructions.
- Monitor, control and interpret water pumping and distribution, wastewater collection and water or wastewater treatment processing equipment status by the use of graphical objects displayed.
- Accumulate process operation data and use historical and current process trends to initiate process control changes as conditions warrant.
- Enter data to generate daily reports and operating logs.
- Perform shift work which includes all day, afternoon, night, weekend and holiday assignments.
- Wear personal protective equipment (PPE).
- A valid Michigan Driver's License and the ability to drive a motor vehicle on all terrain.
- Follow security and safety policies and procedures in carrying out work duties.
- Provide on the job training.



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RELATED JOB FUNCTIONS:

- Regularly inspect the working condition and maintain the cleanliness of equipment and surrounding areas.
- Record reading readings and observations and analyze them against previous readings.
- Troubleshoot new equipment and work with appropriate vendors to learn functionality and how to maintain and repair.
- Prepare periodic and/or special reports.
- Recommend process control strategies.
- Perform related work duties as assigned.

SUPERVISION EXERCISED:

The Systems Technician - Level 3 may be required to perform team coordination activities within the functional unit.

KNOWLEDGE OF:

- Water, wastewater, distribution and collection processes, equipment and systems
- Federal and state statues, regulations and water quality standards in the water industry
- Basic theories, fundamentals, and principles of electricity and electronics related to the repair and operation of power devices, pump motors, switching equipment, process control instrumentation, and tone and digital telemetry
- Methods, materials, tools, and testing equipment used in the installation, maintenance, servicing, calibration, repair, and programming of electrical and electronic equipment used in water and/or wastewater treatment plants, sewage lift stations, water distribution facilities, and hydro-electric plants
- Methods, tools, and equipment used in the maintenance and repair of communications, computing, and telemetry
- Radio telemetry principles
- Computer and microprocessor operation and applications
- Process control hardware and software

SKILL TO:

- Operate, adjust and maintain equipment/machinery components of the type typically used to monitor and control a water distribution and/or wastewater collection system
- Read and interpret meters and gauges
- Conduct precise observation
- Use a variety of computer input devices, process and peripheral equipment
- Use telecommunications devices
- Use advanced technology

ABILITY TO:

- Evaluate new technologies applicable to the facilities
- Read and interpret a variety of monitors, charts and gauges
- Prepare cost estimates and estimates of materials and equipment needs
- Maintain detailed records and prepare clear and concise reports
- Be alert to the system significance of changes in process conditions
- Reason clearly and react effectively during abnormal or emergency conditions
- Make arithmetic computations
- Read, interpret, understand, and work from plans, schematics, technical manuals, diagrams, blueprints and drawings
- Effectively utilize appropriate security and safety equipment and procedures
- Maintain regular and reliable attendance



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ABILITY TO: (continued)

- Analyze work problems and make corrections that will facilitate the completion of assignments
- Communicate effectively, both verbally and in writing
- Understand and follow verbal and written instructions
- Establish and maintain effective working relationships with others
- Communicate frequently with team members and other units across the Department about process, equipment or potential problems
- Develop proficiency in unit specific operations and software
- Direct team activities or to work as a team member
- Work effectively in a team-based, flexible workforce with minimal supervision

Physical Requirements:

The physical demands described here are representative of those that must be met by an employee to successfully perform the essential duties of this job. Reasonable accommodations may be made to enable individuals with disabilities to perform the essential duties.

This position requires the ability to climb, bend, twist, carry, stack, dig, shovel, hit, push, pull and other efforts requiring considerable physical strength. This position also requires the ability to lift a minimum of fifty (50) pounds, walk, stand, or work for long periods of time, demonstrate normal color perception, hear audible alarms, detect abnormal equipment sounds, visually inspect equipment and processes at any time of the day or night. Employees will be required to wear respiratory protection and other personal protective equipment; perform scaffold, confined space, elevated and underground work. Employees will also be required to pass a bio-mechanical physical and vision test, yearly baseline physical and fit test for respirator/Self Contained Breathing Apparatus. While performing the duties of this position, employees are regularly required to use hands to handle, feel or operate equipment.

Environmental Working Requirements:

Work is performed at the plants, field or office environment with exposure to computer screens. This position requires the ability to work in all conditions involving exposure to outside elements and seasonal weather. Work may be performed near open water, systems with hazardous chemicals that are acidic, highly corrosive, heat producing and potentially explosive. The noise level in this work environment is usually loud. Work may be performed in confined spaces, hazardous areas that require respiratory protection and personal protective equipment (PPE), and under slippery and wet conditions.

Other Requirements

Valid Michigan Driver's License

Ability to work irregular hours, to commute to DWSD facilities and work sites, and respond to after hour emergencies and on-call responses

Comments

The Detroit Water and Sewerage Department is an Equal Opportunity Employer.

Please Note: Employment with the Detroit Water and Sewerage Department has been set apart from the established employment processes of the City of Detroit.



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THE WAY WE WORK

The Employees of DWSD....

- Work and accept responsibility to search for, create and execute new and innovative approaches to improve the performance of DWSD's services and objectives
- Assist external and internal customers to serve their needs and take responsibility for continuously improving customer service
- Foster meaningful interaction among people through the exchange of information to produce understanding
- Continuously develop and use effective strategies and interpersonal styles to engage and guide others towards the accomplishment of identified objectives and goals in the best interest of the City and community
- Consistently work toward the common good of the organization and encourage others to do the same
- Conduct themselves at all times in a professionally appropriate and respectful manner in accordance with the DWSD Common Behaviors
- Apply the proper safety/security practices according to established protocols, guidelines and policies

Please submit an employment application, letter of interest and resume for this position to:
Detroit Water & Sewerage Department
Attn: Karen Darty, Human Resources Generalist
735 Randolph, Suite 2001, Detroit, MI 48226

The Employment Application can be found on DWSD's Website:
http://www.dwsd.org/pages_n/careers.html