



Protecting Lake Michigan & Our Waterways.

North Shore Water Reclamation District

Automation Engineer

Design, install, and maintain automated process control systems and equipment.

- Ability to program Allen-Bradley PLCs (PLC5/ControlLogix)
- Experience in SCADA/HMI development (ICONICS preferred)
- Ability to analyze/design/troubleshoot complex control systems
- 5+ years experience in Automation/Controls Engineering
- Strong computer and network skills
- Bachelor's degree in an engineering/scientific discipline
- Must possess a valid Drivers License.

Apply in person or send resume to:

North Shore Water Reclamation District
P.O. Box 750
14770 W. Wm. Koepsel Drive
Gurnee, IL 60031-0750
Fax: 847-623-6101
hmail@northshorewrd.org
Equal Opportunity Employer



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North Shore Water Reclamation District

JOB DESCRIPTION

Title: Automation Engineer **Department:** Process Automation

Job Purpose Statement: Perform functions to design, maintain, install, improve and document automated processing control systems and equipment used in district Water Reclamation Facilities, the Biosolids Recycling Facility, and pump stations.

Reporting Structure: Coordinator of Automation Maintenance

Essential Job Functions:

1. Calibrate, check out and start up systems and devices involving electronic equipment.
2. Start up new and existing equipment, check out system for proper operation, calibrate equipment, perform loop checks, troubleshoot and resolve system problems.
3. Perform scheduled preventive maintenance involving equipment checks and calibrate and adjust equipment as required.
4. Respond to work order requests, troubleshoot and analyze systems, investigate the nature of the problem, check for software and hardware defects, replace and/or repair parts and boards and verify equipment for proper operation.
5. Participate in the planning and development of new systems, meet with engineering consultants, vendors, and operating personnel to determine project objectives and parameters.
6. Design new systems, specify new equipment, develop circuitry required, write needed software, build in safety features, establish bills of material, document and prepare detailed drawings for review.
7. Direct the installation of new systems to ensure specifications codes and safety practices are followed by contractor and/or District personnel and verify equipment operations.
8. Modify existing systems, redesign software and system circuitry as necessary to meet project objectives.
9. Prepare, maintain and update equipment operator manuals.
10. Maintain and modify computer Local Area Network as needed.
11. Make program backups for PLC's, operator interface computers and automation maintenance computers.
12. Respond to emergency calls on a 24-hour basis.
13. Train operating and maintenance personnel on new systems as necessary.
14. Recommend improvements to District standards to encourage safe and reliable equipment operation on newly installed equipment.
15. Locate vendors, write requisitions and refer to Purchasing.

Title: Automation Engineer **Department:** Process Automation

Physical and Visual Activities:

Physical and visual activities that are commonly associated[†] with the performance of the functions of this job.

Standing, Walking, Sitting, Lifting, Carrying, Pushing, Pulling, Climbing, Balancing, Stooping, Kneeling, Crouching, Crawling, Reaching, Handling, Fingering, Feeling, Talking, Hearing, Acuity far, Acuity near, Depth Perception, Field of Vision, Accommodation, Color Vision.

Physical Demands:

Physical demands commonly associated[†] with the performance of the functions of this job.

Over 5 lbs up to 25 lbs up to 15% of the time.

Environmental/Atmospheric Conditions:

Environmental and atmospheric conditions commonly associated[†] with the performance of the functions of this job.

Inside, Outside, Both, Cold temperature changes, Hot temperature changes, Wet, Humid, Noise, Hazards, Odors, Toxic conditions, Dust, Poor ventilation, Usual office environmental conditions.

Job Qualification Requirements

Using the information from the Job Performance Requirements Checklist and the information from the top portion of this page, determine the selection criteria for this position. Include only the minimum hiring qualifications.

Knowledge: Bachelor/Associate Degree in an engineering/scientific discipline with expertise in automated control systems. Knowledge of wastewater treatment, analytical chemistry, and repair and troubleshooting of mechanical, electrical and electronic equipment preferred.

Experience: 5 years experience in industry with control system design; Electrical Control Schematics; AC, DC Low and Medium Voltages; VFDs; Analog and Digital troubleshooting; PLC/HMI/SCADA programming; Local Area Networking, Wireless Plant Instrumentation and Control Transmission, instrument specification and setup, control system start-up experience.

Machines, Tools, Equipment (Office and Industrial), Software: Hand tools, personal computers, Autocad, RSLogix 5/500/5000, PLC 5, ControlLogix, ICONICS product suite, Microsoft Office, multimeters, oscilloscopes, temperature/level/pressure/flow and other types of process measurement, monitoring, and calibration devices.

Licenses/Certifications: Employees in this position shall be required to be legally authorized to operate a motor vehicle for work-related purposes in the State of Illinois.

Other: