

SCADA & Information System Analyst (Water)

Job Number: 2678

Job Type: Full-Time

Location: 2069 Ottawa St S - Mannheim Water Treatment Plant

Job Category: Other

Number of Positions: 1

Department: Supervisory Control and Data Acquisition and Systems

Division: Engineering and Environmental Services

Hours of Work: 35. 8:00 AM - 4:00 PM

Union: CUPE 1883

Grade: CUPE 1883 Grade 014

Salary Range: \$43.61 - \$49.41 per hour

Posting Date: April 8, 2025

About Us!

The Region of Waterloo is a thriving, diverse community committed to fostering opportunities for current and future generations. As part of the Dish with One Spoon wampum, a treaty guiding our commitment to:

- Taking only what we need
- Leaving some for others
- Keeping the dish clean

This agreement underpins our vision, mission, and core value, and reinforces our dedication to meaningful reconciliation. The Waterloo Region is home to over 674,000 residents and expected to grow to nearly one million by 2051.

Guided by our 2023-2027 Strategic Plan, "Growing with Care," we prioritize homes for all, climate aligned growth, economic resilience, and a resilient and future ready organization. Our mission is to provide essential services that enhance the quality of life and value emphasizes caring for people and the land we share. Join us and be part of a team dedicated to making a meaningful difference in our community.

The Role

Assists to maintain and provides technical support for the Division's Supervisory Control and Data Acquisition (SCADA) information, databases, and networking hardware. Provides reports and adapts applications to meet divisional staff's needs (e.g., reporting, water billing).

Duties/Responsibilities

- Assists to maintain the Division's SCADA system, technical information/data, and related systems/databases, ensuring SCADA data transfers are complete and accurate, including after loss of communications. Collaborates with system administrators on issues (hardware and software) and makes adjustments/fixes to SCADA programming.
- Participates in commissioning projects for new/upgraded facilities. Works with project managers to review construction specifications, shop drawings, and other project documentation during the design stage. Facilitates and attends meetings with consultants and contractors; and coordinates with same at sites.
- Provides SCADA technical support at water treatment sites. Performs SCADA interface programming and testing. Works with maintenance staff, consultants, and contractors in the field, including systems edits and configurations. Performs tests, as required.
- Works with operators and maintenance staff to develop control narratives, I/O lists, and test, write, and commission and configuration, including graphics, alarms, trending and reporting systems for changes to the existing SCADA system. Diagnoses, and makes corrections to PLC software, SCADA servers, and historical information system.
- Designs and develops databases and reports for divisional programs that use water supply and distribution data (e.g., pumped/production database for water billing). Consults with end-users to ensure requirements are met, including graphical displays, and continued system maintenance. Performs system stress testing and optimization.
- Maintains documents and programs, including schematics and charts of control systems at water treatment sites. Performs P&ID and Instrument Drawings (P&ID), single line and control drawings. Perform minor AutoCAD services as required.
- Installs, configures, and troubleshoots operational software programs and SCADA equipment, including Operator Workstations. Provides/coordinates networking support; maintains servers and ensures network validity, in collaboration with IT management.
- Assists to ensure software licenses are current.
- Maintains software resources for the creation of systems reports. Ensures data integrity, backup and recovery procedures, investigates and resolves functionality issues.
- Assists with backup, back-filling missing data, and disaster recovery of SCADA system to ensure compliance.

- Recommends program purchases (e.g., computers and peripherals); and performs maintenance and replacement. Researches and evaluates products.
- Performs some backup to SCADA Specialist in that incumbent's absence.
- Performs related duties, as assigned.

Knowledge, Skills, and Abilities

- Knowledge of computer networking; operating systems and devices; and programming languages (e.g., Oracle) through a 3-year community college diploma/university degree in a related field (e.g., computer science, automation) or related experience.
- Knowledge of SCADA systems and related databases, reporting functions, and equipment (e.g., iFIX, programmable logic controllers) to keep knowledge current.
- Must have and maintain a Class I Water Treatment and Water Distribution and Supply Certificate, or attain with Operator-in-Training (OIT) certificate within probationary period.
- Knowledge of and ability to comply with policies, procedures, and related legislation (e.g., health and safety).
- Analytical, organizational, and problem solving skills to work independently; research technical information; select and evaluate related to system design, development, and documentation; and design and develop new systems and software.
- Communication skills to advise, instruct, and train staff on computer software; communicate technical information to users and support staff; present to management, staff, and consultants; and participate as an effective team member.
- Ability to read and interpret publications, trade journals, software documentation and manuals, and systems documentation. Ability to write and prepare reports, documentation, and user manuals/instructions for software.
- Computer skills with ability to use software such as Microsoft Office (including Excel to develop formulas for data analysis) and using drawing software (e.g., Visio 2000, AutoCAD) to create site maps.
- Ability to alter working hours for systems testing. May be requested to work weekend hours to support system testing.
- Ability to be on-call as scheduled, including for weekends and after-hours.
- Ability to travel within Waterloo Region.
- Ability to support and demonstrate the Region's values.

The Region of Waterloo is an equal opportunity employer dedicated to an inclusive and accessible recruitment process. We encourage applications from diverse groups, including Black, racialized, First Nations, Métis, Inuit individuals, women, people with disabilities, and are committed to equity, diversity, accessibility, and inclusion in the workplace.

For an accommodation request, please contact us and we will work with you to meet your accessibility needs. Alternatives are available upon request. Please contact the Service First Contact Centre at phone number (519) 575-4400 to request an accommodation or email talentmanagement@regionofwaterloo.ca.

Please note: candidates will be provided an update on their application. Please check your spam or junk folder occasionally as we have noticed our emails in those folders (Gmail and Hotmail in particular).