UTILITY SYSTEMS (SCADA) ANALYST

Class Code: 84175

Bargaining Unit: Non-Bargaining

MONTGOMERY COUNTY
Established Date: Apr 23, 2017
Revision Date: Apr 23, 2017

SALARY RANGE

$30.85 - $37.81 Hourly
$2,468.00 - $3,024.80 Biweekly
$64,168.00 - $78,644.80 Annually

CLASS CONCEPT:

Advanced level technical position under general direction of the Assistant Director providing broad range of advanced technical support for process control automation Supervisory Control and Data Acquisition (SCADA) systems, laboratory information management systems, and maintenance management systems which support water and wastewater utility operations. Performs the material and substantial duties of the classification more than 50% of the time. May supervise assigned staff.

JOB DUTIES:

Performs Supervisory Control and Data Acquisition (SCADA) system and radio communication system administration duties including management of the functionality, maintenance, and enhancements of the (SCADA) system (e.g., workstations, servers, human machine interface devices, instrumentation, backup power systems, fiber, 900 MHz radios, telecommunication devices, wireless networks) to ensure uninterrupted water and sewer services. Provides technical expertise and guidance for formulation of the strategic automation, controls, alarming and data archiving needs to support regulatory compliance and effective operation of water and sewer systems. Creates and maintains policies, standard operating procedures and standard specifications for the SCADA system. Establishes operational guidelines for graphic displays, tag database format, external system interface requirements, privacy, security, and back-up / recovery controls. Provides technical support for SCADA system upgrades and capital projects to support operations and maintenance of the water and sewer systems. Utilizes various skills including: graphics programming tools and technologies such as Visual Basic and 3D Graphics, programming languages such as Ladder, Function Block, Structured Text and Sequential Function Chart logic: data analytics; and database management.

Establishes and maintains databases (e.g. analytical database, maintenance management database), working to meet department needs for operational data collection, computations, display, archiving, report generation, data quality, consistency and accuracy. Maintains accurate data, schematics and supporting documentation regarding configurations of various systems Designs, installs, programs, tests, configures, documents, and maintains custom and specialized types of software and hardware including local area networks, telecommunication systems, PLCs, utility database management systems and industrial control systems as needed to maintain SCADA system integrity. Performs troubleshooting in the office and field. Provides oversight and direction for employees working with the systems. Conducts user training, education and problem-solving sessions, responds to user complaints and inquiries, identifies users and system needs. Responsible for managing upgrades, yearly maintenance tasks and long-term planning for utility information systems. Works closely with Information Technology Department staff to ensure uninterrupted availability of critical water & sewer information systems. Works closely with operations and maintenance staff on a daily basis to respond to urgent water and sewer needs. Communicates clearly and concisely both orally and in writing. Coordinates with outside vendors and consultants as needed.

(Performs Related Duties as Required)

MINIMUM CLASS REQUIREMENTS:

Must have a valid driver's license with acceptable driving record. Must have an Associate Degree in Information Technology, Engineering, Computer Science or related field and 3 years of work experience in databases, preferably water / sewer process control and automation systems (Other Evidences May Be Substituted).

MAJOR WORKER CHARACTERISTICS:

Knowledge of 1 (budgeting), 8a (employee training and development), 9b (supervision??direct), 10 (OSHA safety practices),* 14 (government structure and process),* 16 (interviewing), 18 (engineering??controls, electrical, techniques of water distribution, wastewater collections, water treatment), 22 (Electronic Data - SCADA systems, control systems), 23 (law--applicable regulatory requirements, standard federal guidelines pertaining to water operations and wastewater collections; regulatory requirements)* Skill in 29 (equipment operation -- personal computer, associated software/hardware, motor vehicle) Ability to 30k(understand practical field of study (e.g., water services / sanitary engineering), 30l (define problems, collect data, establish facts & draw valid conclusions), 30m (interpret extensive variety of technical material in books, journals & manuals), 30o (understand somewhat abstract field of study (e.g., physics, chemistry, math, water and wastewater systems and operations), 30p (deal with non?verbal symbols in formulas, equations or graphs), 30r (deal with many variables & determine specific action (e.g., research, production), 31g (use statistical analysis), 32j (maintain accurate records), 32o (prepare meaningful, concise & accurate reports), 32p (proofread technical materials, recognize errors & make corrections), 32q (use proper research methods in gathering data), 32t (write instructions & specifications concerning proper use of machinery), 32u (develop complex reports & position papers), 34c (cooperate with coworkers on group projects), 34f (handle sensitive inquiries from & contacts with officials & general public), 34e (establish friendly atmosphere as supervisor of work unit). (*Developed After Employment)

UNUSUAL WORKING CONDITIONS:

Potential exposure to hazardous conditions such as adverse weather and exposure to electrical, physical, biological and chemical hazards. Responds to afterhours emergencies.