CENTRAL MARIN SANITATION AGENCY

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JOB DESCRIPTION
Information Systems Administrator

SUMMARY

Under general supervision, installs, oversees, analyzes, maintains, troubleshoots and repairs the Agency's automated process information and control system, servers, workstations, computer networks, phone systems, and other information systems equipment; performs computer and process control system software changes to improve or expand performance; analyzes, develops, and implements new computer programs as required; works closely with Agency Electrical/Instrumentation staff in diagnosing problems with plant process control.

ESSENTIAL DUTIES AND RESPONSIBILITIES

Duties may include, but are not limited to, the following:

Administrative

- Analyzes and evaluates system hardware and software needs; develops specifications, communicates with vendor and manufacturer representatives, and recommends purchases, modifications, and upgrades.
- Develops and monitors budget and expenditures for information technology (IT) equipment and services.
- Schedules and prioritizes work orders and requests.
- Monitors changes in laws, regulations, and technology that may affect IT activities.
- Participates in strategic planning and serves as the IT representative on Agency committees and teams; serves as the Agency representative with other agencies regarding information systems projects and programs.
- Communicates opportunities, issues, challenges, and trends to the Agency management; presents to the Agency Board as requested.
- Trains staff on the use of systems and applications, plant control strategies and interfaces, and cyber security threats and best practices.

Process Control

- Possesses a fundamental knowledge of a variety of automated process information and control equipment, and electrical and mechanical systems.
- Understands process instrumentation diagrams and electrical drawings.
- Understands and implements basic control algorithms such as PID, ratio, timed control, weighted sum, and on-off control.
- Troubleshoots, creates, installs, and maintains PLC hardware and software logic; assists in control strategy development.
- Designs, installs, and maintains wireless voice, data and telemetry radios and systems.
- Maintains and modifies all aspects of the SCADA system.

Security
- Ensures IT backup and disaster recovery plans and infrastructure are developed and maintained, and regular testing occurs.
- Maintains and manages electronic physical security systems.
- Installs, configures, and maintains network security equipment and services.
- Applies principles of systems management to ensure systems are secure and continuously available.

Information Systems
- Drafts and proposes IT policy and procedural changes.
- Plans and provides guidance and leadership on evaluation, selection, implementation, and maintenance of the IT systems.
- Configures, tests, and installs new and upgraded system hardware and software.
- Monitors, troubleshoots, repairs, and maintains servers, wired and wireless networks, cloud infrastructure, voice and PA infrastructure, workstations, and peripheral equipment.
- Modifies existing, or develops new, programs or applications.
- Develops and maintains accurate documentation, records, and agreements.

QUALIFICATIONS
To perform this job successfully, an individual must be able to perform each essential duty satisfactorily.

Education
Equivalent to a bachelor's degree from an accredited college or university with major course work in computer information science and technology.

Experience
Six years of experience in computer operations and technical support for a networked system; including installing, maintaining, and upgrading computer systems. Systems include physical and virtual servers; SAN storage; PC's; wireless technology; and telecommunications, including VOIP telephone and voicemail systems.

Six years of experience in performing system administration and maintenance of industrial control and/or SCADA systems in an operating environment, preferably in a critical infrastructure environment.

Interpersonal Skills
Ability to interact with co-workers, supervisors, vendors, and the general public in a professional manner; to accept constructive criticism; to work as a team member or independently as needed; to prioritize assignments and meet deadlines; to prevent personal problems from adversely affecting your work or that of others; to arrive at work as scheduled and to work the shift hours as scheduled.

Language Skills
Ability to read, analyze and interpret general business periodicals, professional journals, technical procedures, process control and electrical diagrams, and governmental regulations. The ability to write reports, business correspondence, and procedure manuals. Ability to effectively present information and respond to questions from Agency employees, customers, and the general public.

Mathematical Skills
Ability to work with mathematical concepts such as probability and statistical inference, and fundamentals of plane and solid geometry and trigonometry. Ability to apply concepts such as fractions, percentages, ratios, and proportions to practical situations.

Reasoning Ability
Ability to solve practical problems and deal with a variety of concrete variables in situations where only limited standardization exists. Ability to interpret a variety of instructions furnished in written, oral, diagram, or schedule form.

CERTIFICATES, LICENSES, REGISTRATIONS
No certificates, licenses, or registrations are required for this position.

PHYSICAL DEMANDS
The physical demands described here are representative of those that must be met by an employee to successfully perform the essential functions of this job.

While performing the duties of this job, the employee is regularly required to use hands to finger, handle, or feel and talk or hear in person or on the telephone or radio. The employee frequently is required to stand, walk, sit, and reach with hands and arms, and smell. The employee is occasionally required to climb or balance and stoop, kneel, crouch, or crawl. The employee must be able to lift and/or move up to 25 pounds above the head, up to 50 pounds to waist height, and up to 100lbs up to 9" off the ground (such as for a manhole cover). Specific vision ability required by this job includes close vision, distance vision, color vision, peripheral vision, depth perception, and ability to adjust focus.

WORK ENVIRONMENT
The work environment characteristics described here are representative of those that an employee encounters while performing the essential functions of this job.

While performing the duties of this job, the employee is frequently exposed to risk of electric shock; moving mechanical parts; fumes or airborne particles; to wet and/or humid conditions; and outdoor weather conditions. The employee is occasionally exposed high, precarious places; toxic or caustic chemicals; construction project site conditions; extreme heat; and vibration. The noise level in the work environment is usually moderate with occasional exposure to loud equipment. May be required to work overtime and off-shift hours, including weekends, on a project or emergency basis.

SPECIAL REQUIREMENTS
There are no special requirements for this job.

RIGHT TO WORK DOCUMENTATION
Before being hired, all new employees will be required to show documentation as proof of authorization to work in the United States.

Job Title: Information Systems Administrator
Department: Administration
Reports To: Administrative Services Manager
FLSA Status: Non-Exempt
Revision Dates: March 2021