

SILICON VALLEY CLEAN WATER
Job Description
November 2018

Disclaimer – Class descriptions are written as a representative list of the ADA essential duties performed by the entire job classification. They cannot include, and not intended to include, every possible activity and task performed by every specific employee

JOB TITLE: Senior Plant Mechanic – Control Systems Technician

FLSA: Non-Exempt

Every employee shall serve at the will and pleasure of Silicon Valley Clean Water ("SVCW"). No employee has, or may acquire, a property interest, nor any other kind of interest in, or right to, continuing employment with SVCW. The Manager, upon request of an employee who has been discharged, will review all the circumstances of such discharge.

SUMMARY

Under general supervision, performs a variety of skilled electrical, electronic, pneumatic and mechanical instrumentation and controls; installation, fabrication, troubleshooting and repair of computerized automation control work at a modern wastewater treatment facilities and remote pumping stations, and assists in the development of maintenance programs for the preventive maintenance and improvements of all Instrumentation and control system.

ESSENTIAL DUTIES AND RESPONSIBILITIES include the following:

Disclaimer – This list is meant to be representative, not exhaustive. Some incumbents may not perform all the duties listed while in other cases related duties may also be assigned. Reasonable accommodations may be made to enable individuals with disabilities to perform essential functions.

- From work orders, drawings, specifications, and verbal instructions, performs a variety of complex tasks troubleshooting, diagnosis of control system issues, providing solutions or corrective action to resolve the issue.
- Works as a SVCW team member in all work efforts towards the preventive maintenance, repair and installation of all facilities process systems, structures and equipment.
- Develops and implements improvement projects for the facilities structures, systems and equipment.
- Integrate new applications and modify computer programs and equipment to optimize plant operations.
- Assist O&M Staff in the use of the Agency computer control and SCADA system; provide guidance in running daily trend reports, checking control loops, validating telemetry IO points, and assuring proper computer control systems/automation.
- Provide technical support, inspection and coordination over control system modification made by contractors or in-house staff. Maintains documentation and plans of modifications.
- Work with the operations staff assisting in process changes that require SCADA or ladder logic changes in the PLC's.
- Assist in the planning, coordination and scheduling of work.

- Write work plans.
- Performs as lead person on electrical/controls projects.
- Performs repair, maintenance, and installation work to wastewater facilities, instruments, PLC's and other related equipment.
- Assists other instrumentation technicians, mechanics, electricians, and plant staff in the performance of their work tasks.
- Maintains various wastewater plant systems and equipment, such as pump systems, SCADA systems, PLC's, network communications, electronic level, pressure and flow measuring and recording systems.
- Uses electronic monitoring and diagnostic equipment as well as other hand and power tools.
- Makes written estimates of labor, materials, and supplies required for the performance of specific assignments.
- Assures compliance with safety regulations, responds to emergencies.
- Keeps records for work and safety related data; makes verbal and written reports.
- Performs component level repairs and calibration of highly complex instrumentation and SCADA systems.
- Provides safety and skills training to Control System Technicians.
- Conducts studies to facilitate process design and equipment selection.
- Performs a variety of other duties as assigned.

MINIMUM QUALIFICATIONS:

The requirements listed below are representative of the knowledge, skills and abilities required to satisfactorily perform the essential duties and responsibilities.

Knowledge of:

- Silicon Valley Clean Water policies and procedures.
- Knowledge of National Electric Codes.
- OSHA regulations.
- Standard practices, methods, tools, and materials of the electrical, instrumentation, and mechanical trades.
- Electrical and electronics trades.
- Mathematics, chemistry, and physics.
- Use of bench, hand and power tools, machines, and equipment of the electrical/electronic control trades.
- Office equipment such as computer, printer, fax machine, photocopier.
- Word processing, spreadsheet and other related software applications.

Ability to:

- Manipulate hand tools.
- Understand and follow all applicable safety rules.
- Perform routine electrical/electronic control/instrumentation and maintenance work.
- Safely perform routine mechanical & maintenance work requiring the frequent use of hand and power tools.
- Perform heavy manual labor; work in awkward positions.
- Effectively organize and prioritize assigned work.
- Take direction and complete work as assigned.
- Read and write.
- Understand and follow oral and written directions in English.
- Communicate effectively, verbally and in writing in English.
- Work effectively with general supervision.
- Perform arithmetical calculations correctly.
- Work with accuracy and attention to detail.
- Interact positively and cooperate with co-workers and supervision, work as a team member, function under demanding time pressure.
- Drive and operate vehicles, including forklifts in a safe manner at all times.
- Operate PC and related software applications.
- Effectively provide system controls/SCADA/PLC training and direction to Plant Mechanic – Control Systems Technician.
- Improve mechanical maintenance skills through training, mentoring and hands-on experience.
- Trouble shoot and affect repairs to electro-mechanical, hydraulic, pneumatic and mechanical systems.
- Effectively organize and prioritize assigned work.
- Specific vision abilities required by this job include close vision, ability to adjust focus, and ability to distinguish colors.

Effectively work in a collaborative organization focused on continuous improvement; establish and maintain a positive customer service attitude and effective working relationships with internal and external customers; demonstration of strong two-way communication skills, including the ability to listen, explain and facilitate; ability to ask for input; offer help without being asked; accept suggestions; work with others to solve problems; and provide recognition and encouragement; ability to address co-workers needs; identifying issues and concerns, exploring solutions and implementing improvements.

EDUCATION and/or EXPERIENCE:

Any combination of education and experience that demonstrates possession of the requisite knowledge, skills and abilities. A typical way to obtain these would be:

High School Diploma or an equivalent certificate or diploma recognized by the State of California. Associate of Arts or Associate of Science degree with major work in instrumentation, computers and electronics.

Minimum of four (4) years' experience in skilled instrumentation maintenance work involving electrical, instrumentation, and mechanical repair and installation. Repair experience with industrial process type equipment and electrical repairs.

CERTIFICATION and LICENSING:

Must possess at minimum a California Water Environment Association (CWEA) Grade II PM Electrical/Instrumentation Certification or ISA Certification as a Controls System Technician Level II or have experience and/or education equivalent to a journey level electrician/controls Technician, acceptable to SVCW.

Valid California Class C Driver's License and an acceptable driving record as defined by SVCW's Driving Eligibility Standards.

CPR and First Aid certification desirable.

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. Reasonable accommodations may be made to enable individuals with disabilities to perform the essential functions.

While performing the duties of this job, the employee is regularly required to walk, stand, bend, stoop, kneel, and climb. The employee frequently is required to use hands and fingers to handle or feel; reach with hands and arms; and talk and hear. The employee must regularly lift and/or move up to 25 pounds and occasionally lift and/or move up to 50 pounds.

WORK ENVIRONMENT:

The work environment characteristics described here are representative of those an employee encounters while performing the essential functions of this job. Reasonable accommodations may be made to enable individuals with disabilities to perform the essential functions.

While performing the duties of this job, the employee regularly works in indoor and outdoor conditions. The employee works at heights, uses power tools, and works with and around machinery having moving parts. The employee is exposed to outside weather conditions, to gases, fumes and odors, and to untreated and partially treated wastewater. The employee operates light utility vehicles, including a variety of powered vehicles, forklifts and special purpose equipment. The noise level in the work environment may be moderate to loud. May be assigned, or called in, to work in the evenings, nights, and days and/or on weekends, including holidays.