

**SILICON VALLEY CLEAN WATER**  
**Job Description**  
**June 2025**

**JOB TITLE: Plant Mechanic - Electrician**

**FLSA: Non-Exempt**

**CLASSIFICATION: General Represented**

*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 skilled electrical maintenance, installation, and repair work at a modern wastewater treatment facility with remote pumping stations, and assists in the development of maintenance programs for the preventive maintenance and improvements of all electrical systems and equipment. Voltages for which the Plant Mechanic – Electrician is responsible are 120V to 480V.

**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 accommodation may be made to enable individuals with disabilities to perform essential functions.*

- From work orders, drawings, specifications, and verbal instructions, perform a variety of electrical-oriented complex tasks including fabricating parts, fittings and assemblies used in the repair and construction of the plant and pump station facilities, treatment process units and their control systems.
- Work as a SVCW team member in electrical work efforts towards preventive maintenance, corrective maintenance repair, and installation of all facilities, process systems, structures, and equipment.
- Perform rigging to facilitate installation and repair work.
- Inspect electrical work performed by contractors.
- Maintain documentation of materials specifications and project plans.
- Develop and implement improvement projects for SVCW facilities, structures, systems, and equipment.
- Participate in the planning, coordination, and scheduling of work.
- Develop and update Standard Operating Procedures (SOP).
- Investigate job requirements and write specifications to facilitate materials ordering.
- Perform component-level repairs of highly complex motor drive systems (AFD/VFDs).
- Assist other mechanics, electricians, and instrumentation technicians in the performance of their work tasks.
- Perform a variety of duties as a member of a confined space entry team.
- Make written estimates of labor, materials, and supplies required for the performance of specific assignments.
- Keep records; make verbal and written reports.
- Provide electrical safety and skills training, as appropriate, to other staff.
- Perform 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:**

- Knowledge of National Electrical Codes and OSHA regulations.
- Standard practices, methods, tools, precision measuring instruments, and materials of the electrical trade.
- Use of bench, hand, and power tools, machines, and equipment of the electrical trade.
- Office equipment such as computers, printers, and copiers

### **Ability to:**

- Learn and apply Silicon Valley Clean Water policies and procedures and follow all applicable safety rules.
- Safely perform routine electrical, mechanical, and maintenance work.
- Operate and interpret readings from test equipment such as voltmeters, calibrators, and multimeters.
- Effectively organize and prioritize assigned work.
- Take directions and complete work as assigned.
- Understand and follow oral and written directions in English.
- Communicate effectively, verbally and in writing, in English.
- Work independently or as part of a team with limited supervision
- Perform arithmetic calculations correctly.
- Exercise sound judgment, initiative, and problem-solving skills.
- Build and maintain productive relationships with coworkers, vendors, and contractors.
- Drive and operate vehicles, including forklifts, boom lifts, and scissor lifts in a safe manner at all times.
- Improve mechanical maintenance skills through training, mentoring, and hands-on experience.
- Understand functionality of Electrical and electromechanical systems, telemetry systems, transformers, motors, control equipment, and data logging hardware.
- Understand and navigate SCADA platforms.
- Diagnose and repair faults in electronic, pneumatic, and electrical equipment common in wastewater facilities.
- Specific vision abilities required by this job include close vision, the ability to adjust focus, and the ability to distinguish colors.
- Perform heavy manual labor; work in awkward positions.

### **Interpersonal Effectiveness**

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.
- Minimum of one (1) year of experience in skilled Electrical maintenance work involving electrical, electro-mechanical, instrumentation, and mechanical repair and installation of industrial process equipment and control systems.

### **CERTIFICATION and LICENSES**

- Ability to obtain California Water Environment Association (CWEA) Grade I Electrical/Instrumentation Technologist certification within eighteen (18) months of the start of employment or have evidence of completion of an electrician apprentice training program recognized by the California Division of Apprenticeship Standards and approved by SVCW.
- Valid California Class C Driver's License and acceptable driving record as defined by SVCW's Driving Eligibility Standards.
- Obtain certification in CPR and basic first aid.

### **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 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.*

While performing the duties of this job, the employee regularly works in indoor and outdoor conditions. The employee is exposed to chemicals, fumes, and odors, works at heights, uses power tools, and works with and around machinery having moving parts. The employee is occasionally exposed to outside weather conditions and operates a variety of powered vehicles and special purpose equipment. The noise level in the work environment is usually moderate to loud. May be assigned, or called in to work in the evenings, nights, and days and/or on weekends, including holidays. Safety is a priority when performing all SVCW work tasks.

*Disclaimer – Class descriptions are written as a representative list of the ADA essential duties performed by the entire job classification. They cannot include, nor are they intended to include, every possible activity and task performed by every specific employee*