



Silicon Valley Clean Water is accepting Applications for the position of Senior Plant Mechanic - Electrician

\$8,766 - \$11,751 monthly – depending on qualifications and experience;
2% certification incentive pay available; benefited position;
represented by International Union of Operating Engineers, Stationary, Local 39

Silicon Valley Clean Water (SVCW), formerly known as South Bayside System Authority, is a wastewater treatment facility located on the western shore of San Francisco Bay which provides wastewater treatment for 220,000 residents and businesses in southern San Mateo County. SVCW opened in 1982 and plays a vital role in protecting the public health of the surrounding community as well as the environmental health of San Francisco Bay. SVCW is a joint undertaking of the cities of Belmont, San Carlos, Redwood City and West Bay Sanitary District (serving the greater Menlo-Atherton area).

About the Position

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.

Every employee appointed to a position at SVCW shall serve at the will and pleasure of the appointing authority.

Knowledge, Skills and Abilities

- Working Knowledge of: Standard terms, practices, procedures, and modern methods common to the electrical trade as practiced in utility plant processes involving low to medium voltage equipment and electronic controls; shop mathematics; the use and operation of measuring and testing devices; hand tools and equipment of the trade; the National Electrical Code, OSHA, and the industry standard electrical safety requirements specified by the National Fire Protection Association; principles of electrical installation, maintenance, operation, and testing.
- General Knowledge of: The maintenance and operation of diesel engine power generating and related equipment; Electrical Switchgears, programmable logic controllers and relay ladder logic.
- Skill in: Planning, laying out, and executing journey level electrical work in a safe manner; installing, maintaining, trouble-shooting, and repairing a wide variety of electrical and solid state electronic equipment used in power transfer and industrial process control for wastewater treatment, and diesel engine power plant operation; reading and interpreting wiring diagrams and specifications; making estimates of labor and materials; operating a motor vehicle safely.

Typical duties

- Inspects, maintains, repairs, installs, and tests a variety of electrical systems associated with low to medium voltage, utility plant operations such as electrical circuits, transformers, switches, lighting fixtures, motor starters, electro-magnetic relays, voltage regulators, motors, generators, outlets, control panels, electrical components of telemetering systems, cathodic protection systems, and communication networks.

- Performs troubleshooting and diagnostic work on a variety of electrical and solid state electronic based equipment such as variable frequency and variable speed drives, protective relays with digital metering, and automatic transfer switches; performs basic troubleshooting, maintenance, and installations of programmable logic controllers (PLC's). Installs above ground and below ground conduit and pulls wire for motors, control panels, lighting fixtures, outlets, and other purposes.
- Performs phase balancing operations and may make load computations on a variety of electrical circuits; installs and maintains digital and analog circuit protective devices such as uninterruptible power sources (UPS's) and ground fault circuit interrupters.
- Makes as-built and shop drawings of electrical installations.
- May inspect, maintain, repair, install, and test diesel, or other power generating and related equipment such as stationary and mobile emergency generators.
- From work orders, drawings, specifications, and verbal instructions, performs a variety of complex tasks and fabricates parts, fittings and assemblies used in the repair and construction of the plant and pump station facilities, treatment process units and their control systems.
- 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.
- Keeps records; makes verbal and written reports; documents maintenance actions performed onto Computerized Maintenance Management System (CMMS).
- Assists other mechanics, electricians and instrumentation technicians in the performance of their work tasks, and inspects work performed by contractors.
- Uses hand and power tools, precision measuring instruments.
- May perform a variety of duties as a member of a confined space entry team.
- Provides electrical safety and skills training to Plant Mechanic-Electricians and other staff.

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.

Desirable Training, Education, Experience and Certification

- High School Diploma or an equivalent certificate or diploma recognized by the State of California.
- Minimum of three (3) years' experience in skilled Electrical maintenance work involving electrical, electro-mechanical, instrumentation, and mechanical repair and installation. Repair experience with Industrial process type equipment and control systems repairs is preferred.

Licenses and Certificates

- Must possess or obtain within 18-months a California Water Environment Association (CWEA) Grade II PM Electrical/Instrumentation Certification
 - or Possession of a Certified General Electrician License from the State of California Department of Industrial Relations
 - or have experience and/or education equivalent to a journey level electrician, 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 and Sensory Requirements

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

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.

Pre-Employment Procedures

The selection process may consist of an evaluation of the applicant's qualifications, appraisal board interview, written examination, practical exercise and/or internal Department interviews and reference check. Upon completion of the selection process, an offer of employment may be conditionally based upon the successful completion of an employment and education verification, criminal background check, and a pre-employment medical exam.

How to apply –

- Application & Supplemental Questions can be found on the employment page at www.svcw.org
- Email (jflick@svcw.org) or mail the following to SVCW, c/o Jennifer Flick, HR Director, at 1400 Radio Road, Redwood City, CA 94065
 - completed and signed application. A resume and cover letter will not be accepted in lieu of the Authority's application form.
 - completed supplemental questionnaire, and;
 - a current DMV Driver Report.

Filing Deadline – August 24, 2020 by 3:00 p.m. We encourage qualified applicants to apply now. Applications received after the deadline will be returned to the applicant.

**SVCW Senior Plant Mechanic - Electrician
Supplemental Questionnaire**

1. Do you have a high school diploma or equivalent to the completion of the twelfth (12th) grade?
 Yes
 No

2. Do you have a valid drivers' license?
 Yes
 No

3. Do you have any of the following certifications? Please check all that apply or "none of the above".
 CWEA Electrical/Instrumentation Technician Grade I
 CWEA Electrical/Instrumentation Technician Grade II
 Certified General Electrician issued by the CA State Department of Industrial Relations
 Journeyman Electrician, Master Electrician, Electrical Inspector from a licensing state
List State(s) _____
 Other form of certification that would qualify at a Journeyman level for this position
List Certification Type: _____
 None of the above

4. Have you completed trade school coursework, manufacturer certification, or specific education in any of the areas listed below? Please check all that apply or "none of the above".
 Industrial Electrical Systems
 Industrial Power Electronics
 Variable Frequency Drives
 Electronic Reduced Voltage Soft Starters
 Battery Based Power Systems
 Solar Power Systems
 Instrumentation
 Control Systems – Industrial Processes
 Other Electrical Systems
List/Describe: _____
 None of the above

5. How many years of experience do you possess in maintaining, troubleshooting, installing and repairing a wide variety of industrial process electrical systems, electric power supplies, motor control centers, power distribution panels?
 More than 4 years
 2 – 4 years
 1-2 years
 Less than 1 year
 No experience

6. How many years of experience do you have working at a water, wastewater treatment or similar industrial process facility?
 3 or more years
 1-3 years
 Less than 1 year
 No experience

7. Please describe your experience working at a water, wastewater treatment or similar facility. If you do not have experience, please answer N/A.
8. Do you have experience working with a Computerized Maintenance Management System (CMMS) (e.g. Lucity, INFOR, Hansen, Datastream, Maximo, EMaint, etc)?
- Yes
 - No
9. Do you have experience working on the following types of systems? Please check all that apply or “none of the above”.
- Fire Alarm/Security systems
 - Motor Control Centers
 - Transformers / Electric Motors
 - Power monitoring systems
 - Variable Frequency Drives (VFD’s)
 - Robotics / Vision
 - Generator Systems
 - Alternative Energy Systems
 - None of the above
10. Briefly list your experience with any of the following general areas of electrical work:
- Electrical system troubleshooting
 - Conduit and conductor installation, involving advanced and concentric bending principles
 - Electric motor maintenance and replacement
 - Lighting systems or components
 - Power generation Equipment – Generators, Inverters, Power Factor Compensation or similar
 - Electrical Switchboards
 - Building energy management systems.
 - Fiber Optics or Specific Communication Protocols (Profibus, Modbus, Ethernet/IP, DNP3, etc.)
11. Do you have experience working on the following types of documentation? Please check all that apply or “none of the above”.
- Process and Instrument Diagrams (P&ID’s)
 - Electrical Single Line / Distribution Drawings
 - Control Systems / Electrical Control Schematics
 - Building Controls / HVAC Systems
 - None of the above
12. SVCW Maintenance Technicians have a 30-min unpaid lunch each day. We offer 2-work schedules with the day beginning at 6:00am. What would be your preferred schedule?
- 5 – 8-hours days
 - 4 – 10-hour days
13. What was your last involvement, prior to the current date with National Electrical Code continuing education to maintain certifications?
- List the approximate Date and type of involvement:

14. Which of the following software applications are you currently proficient in?

- Microsoft Excel
- Microsoft Word
- Microsoft SharePoint
- CAD – Any Versions
- PLC Programming – Any
- None of the above
- Other

If Other, briefly describe: _____