

SILICON VALLEY CLEAN WATER
Job Description
February 2022

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: Engineer

FLSA: 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

The Engineer will work in the Engineering Division of SVCW which is responsible for implementing a capital improvement program and responding to engineering, process, and system needs of other SVCW divisions related to capital facility, process, and system improvements.

Under general direction of the Engineering Director, manages all aspects of the numerous projects and program within an assigned Capital Improvement Program, assists with Plant Operations, Maintenance, and Laboratory requests for engineering, research, procurement, and capital facilities improvements. Works with all divisions in support of data management needs, process control tracking and improvements, regulatory-initiated and innovation-driven initiatives.

Engineer works directly with the Engineering Director, SVCW staff, Program and Project Managers, Engineering Firms, Consultants, Construction Managers, Contractors, Public Agencies, Regulatory Agencies, and Individuals to provide comprehensive direction, coordination, and implementation of projects in a timely and cost-effective manner.

Individual must possess the knowledge, skills and ability to manage programs containing important complex projects from initial conceptualization, Master Plan development, through Technical Memorandum (preliminary design) phase, to Detailed Design, to Competitive Bidding, Construction, System Start-up, and turnover of system(s) to the end user. Individual must have working knowledge of Wastewater Treatment Plant operations, treatment processes, maintenance procedures, and computer systems involving asset management and industrial automation platforms.

Individual must be able to effectively communicate complex technical project issues both orally and in writing, while maintaining a high quality and effective decision-making process.

ESSENTIAL DUTIES AND RESPONSIBILITIES include the following:

- Develops, implements, and manages specific Capital Improvement Programs and Capital Projects: establishes program and project goals and objectives, develops scopes of work, develops budgets and schedules, oversees progress, and initiates solutions.

- Manages, plans, organizes, coordinates, and directs the activities of program managers, project managers, consultants, engineering firms, construction managers and contractors.
- Develops, implements, and manages capital projects in addition to projects within the CIP and in support of other SVCW divisions.
- Prepares design documents for various capital projects needs within SVCW's facilities, prepares standard construction contract documents, and reviews plans, and specifications developed by outside consulting engineers.
- Initiates and either supports the SVCW Manager or Authority Engineer in reporting or submits reports on commission agenda items for required action.
- Serves as Project Manager as needed.
- Collaborates with specified SVCW staff for various projects related to impact on plant processes, safety, asset tracking, and other considerations important to staff.
- Collaborates as necessary with stakeholders outside of SVCW such as member agencies, regulators, businesses and governmental agencies.
- Participates, gives input and assists in development of master contract specifications.
- Occasionally serves as construction manager and performs inspection of capital projects.
- Meets with CIP Program and Project Managers providing direction and assisting with background information and solution development.
- Gives input concerning performance assessment of program and project managers, consultants and contractors. Including but not limited to assessing qualifications according to SVCW generated criteria.
- Provides input related to construction, operation, maintenance and improvement of treatment facilities, processes, systems, and structures.
- 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, procedures, and directives.
- General Design and construction processes related to wastewater treatment facilities.
- Process control, operation, and maintenance of a large trickling filter/activated sludge wastewater treatment facility.
- Wastewater pumping and force main conveyance.
- Federal, State, and Local laws and regulations guiding public agency procurement, wastewater plant operations and maintenance.
- Best management practices, effective management strategies.
- Program and project management practices.

- Materials and equipment involved in the operation and repair of wastewater treatment facilities.
- Control Strategies for various plant processes.
- Modern office methods and procedures.
- Office equipment such as computer, printer, fax machine, photocopier.
- Word processing, spreadsheet, scheduling, and other related software applications.
- Knowledge of AutoCad software.

Ability to:

- Effectively organize and prioritize workload.
- Communicate effectively verbally and in writing.
- Establish and maintain effective working relationships with consultants, engineering firms, contractors and SVCW staff.
- Manage, plan, organize, coordinate, and direct the activities of program and project managers, consultants, engineering firms, construction managers, and contractors.
- Evaluate treatment processes and mechanical and automation systems; recommending appropriate improvements, changes and additions.
- Interpret diagrams and drawings.
- Maintain records; prepare reports.
- Make presentations to various stakeholders.
- Work with accuracy and attention to detail.
- Operate PC and related software applicable to engineering services.

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:

Six (6) or more years' experience in progressively responsible professional engineering experience including at least two (2) years in a project management position with a publicly owned water or wastewater utility, engineering firm, construction firm, environmental related industry, or similar organization. Education equivalent to graduation from an accredited college or university with major work in civil, chemical, mechanical, electrical, structural, sanitary, or environmental engineering. A Master's degree in Civil, Mechanical, Electrical, Structural or Environmental Engineering is desirable, but not required.

Possession of a valid Certificate of Registration as a Professional Civil Engineer (or other related engineering disciplines) issued by the California State Board of Registration or Certificate of Registration as a Professional Engineer from another State and the ability to acquire valid Certification as a Professional Engineer in the State of California within one (1) year of hire date is required. Experience of twenty (20) years or more in a responsible engineering or technical capacity may be substituted for the professional engineering licensure requirement.

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

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 sit. The employee frequently is required to use hands to finger, handle, or feel; reach with hands and arms; and talk or hear. The employee is frequently required to stand and walk. The employee must regularly lift and/or move up to 20 pounds and occasionally lift and/or move up to 50 pounds. The employee is frequently required to walk up and down stairs, to climb up and down ladders, and to enter process tanks via manways, hatches, and other limited means of ingress and egress. Employee will occasionally be required to enter permitted and non-permitted confined spaces. The employee will regularly be walking in and through construction zones. Specific vision abilities required by this job include close vision and ability to adjust focus.

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 conditions and regularly works near video display. The employee is occasionally exposed to fumes and odors, works at heights, and works with and around machinery having moving parts. The employee is exposed to outside weather conditions and construction zones. The employee uses personal vehicle and occasionally works in evenings or on weekends. The noise level in the work environment is usually minimal with occasional exposure to moderate levels.