

**SILICON VALLEY CLEAN WATER**  
**Job Description**  
**Jan 2007**

*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: Water Quality Specialist**

**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 laboratory analysis and commercial/industrial inspection. The duties of this position include but may not be limited to: sample collection, laboratory analysis, field inspection, compliance investigation, pollution monitoring, record keeping, equipment maintenance and computer support.

**ESSENTIAL DUTIES AND RESPONSIBILITIES include the following:**

*Note – 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. This position has two areas of focus: laboratory and source control. Employees are appointed to a specific focus area. In order to achieve higher pay grades employees are expected to be cross-trained and periodically work in the other focus area.*

- Collects a variety of samples from locations around the Authority treatment facility and from other locations in the field, including San Francisco Bay, SVCW Pump Stations, industrial sites, etc.
- Analyzes samples from industrial and commercial businesses, from a variety of wastewater sources, from wastewater treatment processes, final effluent and a variety of field locations such as San Francisco Bay.
- Performs careful and accurate chemical, physical, biochemical, and bacteriological analyses; follows established procedures.
- Maintains appropriate logs and records.
- Handles fish used for bioassay procedures; maintains fish tanks; conducts chemical and physical analyses of water in fish tanks.
- Uses instrumentation to measure chemical or physical properties of various materials.
- Prepares standard solutions, reagents and culture media.
- Cleans, maintains, and calibrates glassware, equipment, and instruments.
- Follows quality control and quality assurance procedures; performs regular quality assurance checks; maintains safe laboratory environment.

- Compiles, calculates and records data; prepares forms, bench sheets, and documentation.
- Performs surveys and detailed inspection of industrial and commercial businesses such as electroplating shops, pharmaceutical manufacturing facilities, hospitals, auto shops, restaurants, medical facilities; prepares inspection reports.
- Develops wastewater and groundwater discharge permit conditions; evaluates discharge permit applications; reads and records data from water meters, pH recorders and other monitoring devices.
- Inspects water courses and piping systems; compares plans and schematic diagrams to actual building layouts and equipment installation.
- Determines compliance with appropriate wastewater codes and regulations; coordinates enforcement and violation resolution with industries.
- Collects priority pollutant samples; monitors odors, pH trends, etc.
- Compiles a variety of data; maintains appropriate records; prepares written and graphical reports, including descriptive narrative.
- Repeatedly transfers numerical data without errors.
- Cleans, maintains and calibrates glassware, equipment and instruments.
- Uses word processing, spreadsheet and specialized applications on a computer.
- Performs limited diagnosis and repair of computer hardware and software problems; updates hardware drivers; installs and updates software; configures new computers; performs Help Desk duties.
- Assists coworkers as needed to complete work; trains coworkers; assists with method development.
- Responds to residential and commercial sewer complaints.
- Participates in pollution prevention and educational outreach programs.
- Cleans, maintains, and repairs lab and source control equipment, instruments, and vehicles.
- Communicates effectively with coworkers, business representatives, regulatory staff and the public.
- Works weekends, holidays and overtime as required.
- 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. This position has two areas of focus: laboratory and source control. Employees are appointed to a specific focus area. The qualifications at the time of appointment may be limited to those required by the position being filled.*

**Knowledge of:**

- Silicon Valley Clean Water regulations.
- Regulations applicable to wastewater sampling and analysis, and industrial monitoring.
- Basic concepts of industrial treatment processes, wastewater treatment processes, wastewater pump station operation.
- Wastewater sampling, sample handling and preservation procedures.
- General chemical quantitative analysis, standard laboratory procedures and standard laboratory equipment.
- Simple mathematics and statistics.
- Organic and inorganic chemistry, biology, and microbiology.
- Safety precautions and procedures applicable to laboratory work and wastewater sampling.
- Wastewater plant laboratory equipment and instruments such as probes, various meters, samplers, pipettes, incubators, titrators, spectrophotometers, distillation and filtration apparatus.
- Office equipment such as computer, printer, fax machine, photocopier.
- Word processing, spreadsheet and other related software applications.

**Ability to:**

- Safely operate a motor vehicle.
- Perform laboratory and field analysis.
- Monitor compliance with wastewater regulations.
- Plan and coordinate activities such as sampling events, analyses and inspections.
- Operate, troubleshoot, calibrate and repair equipment.
- Operate PC and related software applications.
- Work safely with accuracy and attention to detail.
- Maintain records; prepare reports.
- Work independently with minimal supervision; multitask.
- Comprehend oral, written and graphical material, including schematics and engineering/architectural drawings.
- Effectively organize and prioritize assigned work.
- Communicate effectively verbally and in writing.
- Train other staff.
- Establish and maintain effective working relationships.

**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:*

Bachelor's degree in chemistry, microbiology, biochemistry or related science.

One (1) year experience in an analytical laboratory or in business inspection.

**CERTIFICATION and LICENSING:**

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.*

While performing the duties of this job, the employee is regularly required to sit, walk and stand. 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 50 pounds. Specific vision abilities required by this job include close vision, and ability to adjust focus and to discriminate small color changes.

**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 and regularly works near video display. The employee is exposed to odors, occasionally uses power tools, and occasionally works with and around machinery having moving parts. The employee is occasionally exposed to outside weather conditions and uses a motor vehicle and occasionally works evenings or on weekends. The noise level in the work environment is usually minimal to moderate.