

**City Of Redwood City
Public Works Services Department
WATER QUALITY SPECIALIST**

DEFINITION

Under general direction, works independently to manage and perform a variety of activities related to ensuring that the City's potable water distribution system complies with current and future Department of Health Services regulations regarding water quality. Perform field, office and technical work and oversee the work of maintenance workers, consultants, and contractors in duties related to water quality. Answer inquiries from the public, responds to water quality complaints and keeps records.

SUPERVISION RECEIVED AND EXERCISED

General direction is provided by a Public Works Services manager.

Responsibilities include functional and technical supervision and assisting in the performance evaluation of employees of the Water Maintenance Division.

EXAMPLES OF IMPORTANT AND ESSENTIAL DUTIES

Duties may include, but are not limited to the following:

1. Ensures compliance with all Federal, State and local laws, rules and regulations and guidelines pertaining to potable and recycled water quality standards, sampling, testing, record keeping and reporting.
2. Establishes and implements water sampling operations and procedures, reviews specifications for water quality testing equipment and maintenance; conducts field sampling and analysis; coordinates and participates in the collection, interpretation and evaluation of water quality data, keeps detailed and accurate records.
3. Prepares operational and water quality reports from field data collected and from laboratory analysis. Keeps accurate and current operational water quality related records on computerized spreadsheets. Submits required reports to the California Department of Health Services. Prepares the annual Consumer Confidence Report.
4. Develops schedules and oversees the implementation of the distribution system unidirectional and dead end flushing programs.
5. Prepares requisitions and controls inventories for supplies and equipment; obtains quotations for water quality projects and equipment and prepares purchasing documentation.
6. Answers inquiries from the public, responds to water quality complaints; keeps records and tracks water quality complaints.

7. Makes recommendations for improvement and rehabilitation projects related to water quality and coordinates with Water Utility Services Managers and City Engineering & Construction Services on implementation of these projects.
8. Assists in the planning and implementation of various public education programs related to water quality; makes presentations to community groups and associations.
9. Coordinates and inspects the work of a variety of contractors related to water quality projects.
10. Participates in preparing technical reports and presentations for City Council and other governmental agencies.
11. Sets priorities, exercises independent judgement, and communicates effectively both orally and in writing.
12. Establishes and maintains effective working relationships with fellow employees, members of the general public and representatives from other agencies.
13. May be required to work evenings, weekends and holidays; and performs other related duties as required.

OTHER RELATED DUTIES

1. Perform related duties and responsibilities as assigned.

JOB RELATED QUALIFICATIONS

Knowledge of:

Water quality sampling technology, methods and procedures within potable and recycled water distribution systems.

Water quality treatment processes and technology, including chloramination.

Water quality control and quality assurance principles and practices, including nitrification prevention and control methods.

Water distribution systems, including storage tanks, mains, valves, dead ends, turnouts and water system hydraulics.

Techniques of supervision, communication and training.

General principles and procedures of water treatment and distribution. AWWA water quality standards.

General principles and practices of mathematics, modern chemistry, bacteriology and microbiology as applied to water quality, treatment and analysis.

Water quality regulations and laws (i.e.; Safe Drinking Water Act, Clean Water Act, Porter Cologne Act, Title 17, Title 22 and NPDES requirements).

Computer systems and software application such as Word, Excel, Access, GIS, SCADA Systems and hydraulic modeling.

Water quality instrumentation and equipment, analytical laboratory procedures, and treatment processes control systems.

General safety practices and procedures.

Skills to:

Safely perform simple laboratory procedures.

Investigate and analyze water quality situations within the City's water distribution system.

Make routine chemical analysis, perform basic laboratory procedures and handle chemicals common to the field of Water Quality.

Review specifications for water quality equipment.

Conduct field sampling and analysis; coordinate and participate in the collection, interpretation and evaluation of water quality data.

Ability to:

Direct and oversee the work of others.

Operate analytical equipment and instrumentation.

Set priorities and exercise independent judgment; analyze complex data and reports and correspondence.

Establish water sampling operations and procedures.

Keep detailed records accurately and neatly.

Prepare reports and requisitions.

Communicate clearly and concisely, both orally and in writing.

Establish and maintain effective working relationships with those contacted in the course of work.

Use of a computer and a variety of word processing and software applications.

Must have the ability to remain calm in emergency situations. May be required to work weekends and evenings as emergencies arise.

LICENSES:

Possession of a valid California driver's license, and satisfactory driving record.

Possession of a California Department of Health Services Water Distribution Operator Grade D2 certificate. Must acquire a Water Distribution Grade D3 within 18 months of appointment.

Possession of a California Department of Health Services Grade T2 Water Treatment Operator certificate is highly desirable.

EDUCATION AND EXPERIENCE:

Any combination of experience and training that would likely provide the required knowledge and abilities is qualifying.

Associate of Arts or Science degree in chemistry, biology, bacteriology, environmental science or a Bachelor of Arts or Science degree in one of these fields is highly desirable.

SPECIAL REQUIREMENTS:

Essential duties require the following physical abilities and work environment:

Position requires prolonged standing, walking, twisting, turning, kneeling, bending, and squatting. Must be able to work outside in varying climatic conditions, lift heavy objects up to fifty pounds, climb ladders and water tanks, and be in sufficiently good health to perform all job duties.