



MARIN MUNICIPAL WATER DISTRICT

Principal Engineer-Water Quality

DEFINITION

Under administrative direction as a technical expert and manager of the Water Quality Engineering Division of the Engineering Department, with responsibility for planning, organizing, directing and representing the District's internal and external water quality program and regulatory planning and analysis activities; monitors legislative and regulatory initiatives governing water quality; manages the operation of the District's potable and recycled water treatment plants and water quality laboratories; and to do related work as required.

DISTINGUISHING CHARACTERISTICS

The individual in this class serves as a high level, technical subject matter expert. The position has program management responsibility for directing District-wide activities related to potable and recycled water quality and regulatory planning and analysis as well as providing assistance in water system operations. Successful performance requires that ability to apply broad based operational knowledge of water quality technology in developing programs, priorities, and strategies that support efficient and effective management of the District's water system. This classification may take temporary charge of the day to day activities of other divisions within Engineering Department due to vacations or vacancies. This class reports directly to the Assistant General Manager/Manager of Engineering and Environmental Services.

EXAMPLES OF DUTIES

Typical duties may include but are not limited to the following:

- Establishes water quality and treatment programs and priorities to meet water quality goals and objectives;
- provides guidance and consultation on water quality activities, including protection of water sources, optimization of treatment processes, and distribution system practices;
- provides direction, analysis, and support to efficient and effective management of the District's water quality laboratories and water treatment facilities;
- prepares and directs the District's strategy for the maintenance and enhancement of potable water quality and business practices to assure cost effective achievement of water system service levels;
- represents the District in connection with state and federal water quality legislation issues at meetings or conferences on water quality;
- provides a central source of information on water quality, technical, legislative, regulatory and other related issues;
- plans, supervises, reviews and coordinates District's Legislative and regulatory management planning and analysis;
- performs administrative duties such as operational and budget preparation and control, employee selection, training and evaluation and report preparation;
- may represent the department and the District as directed;

- may plan and supervise the work of professional and subprofessional engineering personnel engaged in the planning, design and costing of water facilities;
- manages the preparation of contract documents leading to the construction of water facilities;
- recommends priorities of planned engineering projects and calculates project costs;
- directs the training and supervision of professional and subprofessional engineering personnel;
- develops requests for proposal, and selects consultants for water quality studies or facility projects;
- prepares and revises policies and procedures;
- supervises the maintenance of department files and records and the preparation of various reports;
- ensures that safe working conditions are maintained.

QUALIFICATIONS FOR EMPLOYMENT

Knowledge of:

- Federal, State, and local laws and regulations governing water quality and recycled water treatment;
- the application to District operations of the National Environmental Policy Act, Safe Drinking Water Act, the Clean Water Act and related legislation and regulations;
- principles and practices and methods of the production, supply, transmission and treatment of domestic water supplies;
- physical, chemical, microbiological and bacteriological analysis of water;
- regulatory and legislative process in local, State and Federal government;
- principles and practices of personnel management, supervision and training;
- principles, practices and methods of civil engineering as applied to the design and construction of water facilities and related systems;
- methods and use of materials and equipment used in water facility construction;
- District policies and procedures;
- proper spelling, grammar, punctuation and writing practices.

Ability to:

- Analyze and evaluate complex water quality and environmental legislation and regulations;
- coordinate District resources in a multi-disciplinary approach to formulating responses to proposed legislation and regulatory issues;
- analyze complex technical and administrative problems, evaluate alternatives and reach sound conclusions;
- provide liaison and coordination with District staff, regulatory and legislative agencies and public and private organizations;
- make clear, concise and effective written, graphic and oral presentations of complex and/or controversial information;
- establish and maintain effective working relationships with District officials, regulatory and legislative agencies, special interest groups and others contacted in the course of work;
- exercise sound, independent judgment within general policy guidelines;
- develop work standards and evaluate personnel needs, establish and maintain effective working relationships;
- plan, supervise and evaluate the work of an engineering department of professional, subprofessional and clerical employees;
- develop and control an operating budget;
- manage the preparation of construction documents;

- establish and maintain effective working relationships with those contacted in the course of work;
- interpret and apply safety rules and regulations to work assignments;
- depending upon job assignment; drive a vehicle;
- travel to alternative work locations and offsite meetings.

Training and Experience: Any combination equivalent to experience and education that could likely provide the required knowledge and abilities would be qualifying. A typical way to obtain the knowledge and abilities would be:

- Equivalent to graduation from a four-year college or university with a Bachelor's degree in an engineering curriculum which is accredited by the Engineers' Council for Professional Development, with related course work in environmental services;
- seven years of increasingly-responsible engineering experience, at least three of which must have included responsibility for supervising the work of an extensive professional staff handling a wide variety of assignments, which include the supervision of the operation of a major technical program in a water system with the emphasis in source protection and treatment;
- California State Registration as a Professional Civil or Mechanical Engineer.

OTHER REQUIREMENTS

- Per California Government Code, Title 1, Division 4, Chapter 8, Section 3100 "all public employees are hereby declared to be disaster service workers subject to such disaster service activities as may be assigned to them by their superiors or by law."

LICENSES AND/OR CERTIFICATIONS

- Possession of or the ability to obtain an appropriate California driver's license issued by the State Department of Motor Vehicles and satisfactory driving record.

PHYSICAL DEMANDS AND WORKING CONDITIONS

During the course of performing job duties the employee will need the mobility to work in a standard office setting, operate equipment, which may include office and/or field equipment, or specialized instruments or tools requiring repetitive arm/hand movement and/or the coordinated movement of more than one limb simultaneously; enter and retrieve data from personal computers and terminals via keyboards which is often performed while sitting for extended periods of time. The employee frequently stands, walks, bends at neck and waists, twists at neck and waist, uses simple and power grasping with both hands, uses fine manipulation of both hands and fingers, and may require use of the arms above the shoulder, climb or balance; stoop, kneel or crouch. While working in the field the employee may walk on uneven or un-level ground surfaces such as hills, slopes, ditches or trenches, on or in tanks, and may work at heights up to ten to twelve feet climbing ladders or stairs. The employee is occasionally required to lift and carry short distances objects such as reams of copier paper, office supplies, files, books, printed materials and other packages or equipment weighing up to 10 to 25 pounds. This position requires that the employee demonstrate adequate hearing and speech to converse in person and over the telephone, and vision to read printed materials and use a computer screen.

The noise level in the work environment is quiet to moderate noise. The employee is exposed to outdoor temperature, humidity, wetness and dust. The position may require the ability to work overtime and weekends as needed.

Employees who drive on District business to carry out job-related duties must possess a California driver's license for the class of vehicle driven and meet automobile insurability requirements of the District including review of a recent DMV history. In order to drive, individuals must be physically capable of operating the vehicles and equipment safely.

To be successful in this job, an individual must be able to satisfactorily perform each of the listed duties. These duties are representative of the knowledge, skill and/or ability required for the position. Reasonable accommodations may be made to enable individuals with disabilities to perform the duties and functions of the position. Requests for reasonable accommodation should be directed to the Human Resources Manager.

Established: September 1999
Revised: October 2008
Approved by: Human Resources Manager