

## Sacramento Suburban Water District Classification Specification

<b>Job Title:</b>	Assistant/Associate Engineer
<b>FLSA Status:</b>	Non Exempt at Assistant Level Exempt at Associate Level
<b>Supervisor:</b>	Engineering Manager or Senior Engineer
<b>Effective Date:</b>	August 2017

### **Definition/Distinguishing Characteristics**

Under general supervision, this position performs professional engineering work in the planning, design and construction of District structures and facilities, including improvements for groundwater wells and water production, storage and distribution facilities; provides project coordination and direction to technical engineering staff; may serve as resident engineer on construction projects; and assumes varying degrees of responsibility for the engineering requirements of water system operations, pipeline distribution systems, groundwater wells, pump stations and treatment facilities. This is a flexibly staffed class series.

Assistant Engineer: This is the entry level in the professional engineering series. Employees at this level are not expected to perform with the same level of independence of direction and judgment on matters allocated to the Associate Engineer. Since this class is typically used as a training class, employees have only limited or no directly related professional engineering work experience. Employees work under general supervision from higher level engineering staff while learning job tasks.

Associate Engineer: This is the journey registered level in the professional engineering series. This class requires possession of registration as a Professional Engineer with the State of California with the ability to independently review, approve and stamp plans and will be assigned the full range of professional engineering duties. Employees at this level receive only occasional instruction, assistance or direction from higher level engineering staff as new or unusual situations arise and are fully aware of the District's operating procedures and policies. Incumbents may exercise direct supervision of technical engineering staff and interns.

### **Example of Duties**

The following duties are typical for this classification. Depending upon the assignment, the employee may not perform all of the listed duties and/or may be required to perform additional or different duties from those set forth below to address business needs and changing business practices. Management retains the right to add, remove, or change duties at any time.

#### Groundwater Resources:

- Analyzes groundwater hydrogeology, well operation and design.
- Monitors groundwater well and pump performance and efficiency using various criteria.
- Performs reconnaissance, evaluation of production loss and testing of groundwater wells and pumps.

- Makes recommendations on repairs, rehabilitation and/or improvements.
- Performs construction inspection of well repair, rehabilitation and improvement projects and other water production facility infrastructure.
- Coordinates with and assists outside engineers and contractors with planning, design, preparation of plans and specifications and environmental assessment reviews for the construction and development of groundwater wells and water production and treatment facilities.
- Assesses groundwater quality/quantity and prepares plans to develop and optimally utilize groundwater aquifers.
- Oversees the gathering and interpretation of hydrogeological data compiled from chemical and physical tests made on groundwater samples in the field or laboratory; offers technical assistance and consultation to other staff relative to hydrogeological aspects of groundwater monitoring and protection.
- Makes recommendations and oversees all requirements related to the abandonment and destruction of groundwater wells in accordance with applicable state/county standards.
- Oversees, maintains and collects various data from groundwater monitoring wells with assistance from District staff.

#### Capital Improvement and Development Projects:

- Develops and/or assists with the preparation of designs, plans and specifications for the construction and development of District structures and facilities.
- Planning, design and construction of well rehabilitation projects.
- Performs construction inspection of water facility infrastructure projects, based on assignment.
- Performs contract administration, prepares change orders and monthly reports and provides recommendations for scope of work changes.
- Schedules and attends pre-construction meetings and monitors construction site conditions, both before and during construction.
- Prepares estimates of materials, quantities and probable construction costs.
- Meets with developers and outside engineers to discuss concepts and general requirements for new projects; coordinates outside engineers and contractors with design and construction of domestic water and water treatment facilities.

#### General:

- Insures project compliance with plans, standards and specifications.
- Manages a variety of projects simultaneously, from conception through construction, which involves developing project schedules, monitoring project progress and budget, obtaining necessary permits, preparing and maintaining project files, monitoring quality of projects, and insuring deadlines are met.
- Acts as interface between District and its customers on engineering projects including, but not limited to, answering questions, providing information, reviewing disputes and/or claims, and recommending reasonable dispute and/or claim resolutions.
- Analyzes and interprets federal and state regulations pertaining to District projects.
- Prepares and maintains correspondence and documents, including District Groundwater Well Asset Management Plan, annual report on well rehabilitation and replacement plans, District long-range master plans, environmental assessment reviews, and grant applications to obtain capital project funding from various state and/or federal agencies.
- Assists contractors and the general public with questions regarding water pressure, water

quality, fire sprinkler systems and related issues.

- Represents the District in coordination with other utilities, regulatory agencies, governmental bodies, planning agencies, trade and professional associations, technical groups and developers.
- Provides support to the Engineering Manager in making presentations regarding engineering issues, water production and/or capital improvement projects to the Board of Directors.
- Performs computer modeling; creates and edits computer-generated engineering drawings.
- Assistant Level Only: Maintains regular attendance and adheres to prescribed work schedule to conduct job responsibilities.

### **Mental and Physical Requirements**

The conditions herein 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 job functions.

- Travels occasionally by airplane and frequently by automobile in conducting District business.
- Communicates frequently with District management staff, co-workers and the public in one-to-one and group settings.
- Regularly uses a telephone for communication.
- Uses computer, keyboard and mouse.
- Uses office equipment such as copiers and fax machines.
- Frequently walks in uneven terrain, in an outdoor environment, making inspections of District facilities and construction projects.
- Sits for extended time periods.
- Hearing and vision required to be within normal ranges with or without correction.
- Must wear CalOSHA approved protective footwear with a minimum ANSI I/75 or equivalent ASTM rating.
- Assistant Level Only: Occasionally may be required to change working hours or work overtime.

### **Qualifications**

#### ***Knowledge Of:***

- Principles and practices of engineering with particular emphasis on the design and construction of water wells and production facilities, water development and distribution, water treatment, groundwater systems and other hydraulic projects and facilities, including use of computer-aided drafting (CAD) software.
- Federal, state and local laws and regulations governing groundwater management and protection.
- Basic hydrogeological methods and techniques.
- Principles of engineering economics and their practical application to water development, water distribution and water treatment projects.
- Laws, rules, ordinances and legislative processes including CEQA requirements governing water rights, water development and production, water quality, and water treatment.
- Public finance, budget development and fiscal controls, and capital improvement fiscal planning.

- Contract development and administration, including project and program scheduling.
- Principles and practices and water supply development, chemical and biological aspects of water pollution, and local water issues, including their relationships to State and regional plans.
- Common office computer software and database programs, including the Microsoft Suite of Programs (Word, Excel, Outlook, Access and PowerPoint).
- Associate Level Only: Principles of employee training and supervision.

***Ability To:***

- Inspect, plan, organize, manage and administer construction projects in the District and perform comprehensive administrative reviews of construction work activities.
- Plan, carry out, and coordinate District engineering projects, particularly as they affect wells and water production facilities, water distribution and system development, hydrogeology, water quality and water treatment.
- Develop long-range capital improvement plans.
- Prepare and monitor project budgets insuring proper completion and inspection of major construction projects.
- Prepare and develop plans, reports, specifications, contract documents and District engineering standards.
- Prepare and review a variety of engineering studies and reports, and perform hydraulic modeling.
- Use computer systems and software packages related to engineering, analysis and functions, including CAD systems.
- Communicate effectively both orally and in writing.
- Effectively represent the District's engineering functions with the public, other governmental and outside agencies, contractors, developers and professional engineering consultants.
- Establish and maintain cooperative working relationships with co-workers, outside agencies, vendors, consultants/contractors and the public.
- Pass pre-employment physical, drug and alcohol examination, and background check.
- Associate Level Only: Provide supervision, training and work evaluations for assigned staff.

***Education, Experience, Licenses and Certifications:***

***Required:***

- Bachelor's Degree in Civil, Chemical, Environmental or Mechanical Engineering, or a related field, from an accredited college or university.
- Valid California Driver's License issued by the California Department of Motor Vehicles.
- Proof of good driving record as evidenced by freedom from multiple or serious traffic violations or accidents for at least two (2) years duration. The driving record will not contribute to an increase in the District's automobile rates. Individuals who do not meet this requirement due to a physical disability will be considered for accommodation on a case-by-case basis.
- Associate Level Only: Possession of a Certificate of Registration as a Professional Engineer in the State of California and two (2) years of experience in water system planning, design and construction, including evaluating groundwater wells; planning,

design, construction and rehabilitation of groundwater wells and production facilities; and/or developing water distribution and/or treatment systems and facilities.

Registered engineers must complete the requirements to maintain the required license as a condition of continued employment.

***Desirable:***

Any combination of education and experience which would likely provide the necessary knowledge and abilities is acceptable. A typical way to obtain the knowledge and abilities would be:

For Both Levels:

- State of California Distribution Operator Certificate Grade D2 or higher is highly desirable.
- State of California Treatment Operator Certificate Grade T2 or higher is highly desirable.

Assistant Engineer:

- Six (6) months to one (1) year of directly related professional engineering experience in water system planning, design and construction, including evaluating groundwater wells; planning, design, construction and rehabilitation of groundwater wells and production facilities; and/or developing water distribution and/or treatment systems and facilities.
- Possession of an Engineer-In-Training certificate issued by the California Board for Professional Engineers and Land Surveyors; additional experience may be substituted in place of the certificate.

Associate Engineer:

- Additional years of responsible professional engineering experience in water system planning, design and construction, including evaluating groundwater wells; planning, design, construction and rehabilitation of groundwater wells and production facilities; and/or developing water distribution and/or treatment systems and facilities.

**The specific statements shown in each section of this class specification are not intended to be all-inclusive. They represent typical elements and criteria necessary to successfully perform the job.**