

# SAN BERNARDINO MUNICIPAL WATER DEPARTMENT

## CLASSIFICATION SPECIFICATION

**TITLE: SENIOR ENGINEER**

**DATE: 1/26/09**

**JOB CODE: 51760**

**FLSA STATUS: EXEMPT**

**UNIT REPRESENTATION: MID-MGMT**

*Class specifications are intended to present a descriptive list of the range of duties performed by employees in the class. Specifications are not intended to reflect all duties performed within the job.*

### **DUTIES SUMMARY**

Under general direction of the Engineering Manager, to assist in planning, scheduling, and supervising water utility engineering processes; to participate in the gathering and compiling of data and the preparation and review of designs, plans, estimates, specifications, and reports for the construction, alteration, and maintenance of water utility, water reclamation, hydro-generation and geothermal systems.

### **DISTINGUISHING CHARACTERISTICS**

The class of Senior Engineer is the advanced level professional class in the engineering series. Supervision is received from the Engineering Manager, the Director of Water Utility, and/or the Director of Water Reclamation. Supervision may be exercised over subordinate engineering staff.

### **EXAMPLES OF DUTIES**

*The following duties are typical essential duties for positions in this classification. Any single position may not perform all of these duties and/or may perform similar related duties not listed here.*

- Provide courteous and expeditious customer service to the general public and City department staff;
- Routinely adhere to and maintain a positive attitude toward City and Department goals;
- Assist in planning, scheduling and supervising engineering projects and processes;
- Supervise and participate in the preparation of designs and plans for water and wastewater additions and improvements such as reservoirs, pumping plants, pressure reducing/sustaining stations, water distribution and transmission mains, sewer lift stations, wastewater/water reclamation treatment processes (preliminary treatment,

advanced primary treatment, biological nutrient removal secondary treatment, tertiary filtration, anaerobic digesters, sludge dewatering, cogeneration, oxidation ponds, chlorine contact basins, UV disinfection, etc.), and buildings and hydro-generation installations;

- Check design work in progress for accuracy of calculations and conformance with established engineering methods, procedures and Department standards;
- Manage consultants who perform professional design services for accuracy of calculations and conformance with established engineering methods procedures and Department standards;
- Review completed designs, specifications, cost estimates, legal descriptions and related documents;
- Calculate cost estimates;
- Calculate elevations;
- Approve legal descriptions;
- Write construction orders;
- Provide engineering information to contractors, engineers and members of the public;
- Coordinate the compilation of data for audit reports;
- Evaluate and approve the work of subordinates;
- Instruct assigned staff in work methods;
- Perform the more difficult work of the unit;
- Conduct studies and investigations, preparing reports of findings and recommendations;
- Compose correspondence, requiring use of judgment based upon a thorough knowledge of the functions and procedures, for review by supervisor;
- Operate Department vehicles; and
- Perform related work as required.

## **QUALIFICATIONS**

*Any combination of education, training and experience that would likely provide the knowledge, skills and abilities to successfully perform in the position is qualifying. A typical combination includes:*

### **Knowledge of:**

- Basic principles of supervision;

- Methods of water and wastewater engineering and construction;
- Federal and State safety, water, wastewater, air quality, and environmental laws and regulations;
- Types and variety of equipment, tools, and materials used in water utility construction;
- Basic surveying;
- Basic public relations and customer assistance;
- Appropriate safety precautions and procedures.

**Ability to:**

- Assist in supervising and training water utility/reclamation engineering staff;
- Assist in planning and organizing a unit of engineers and engineering technicians to perform tasks delegated by the Engineering Manager;
- Read, understand and prepare complex engineering drawings, specifications, and contract documents;
- Prepare clear and concise technical reports and cost estimates;
- Perform construction inspections;
- Conduct thorough investigations, organize data, and draw sound conclusions;
- Review and comment on environmental documents;
- Delegate responsibility to employees at the technical and professional level;
- Operate a vehicle observing legal and defense driving practices;
- Understand and carry out oral and written instructions;
- Establish and maintain effective relationships with those contacted in the course of work.
- Lift up to 50 pounds in normal duties;
- Work under moderate or high stress conditions;
- Maintain a driving record that meets vehicle code standards and is acceptable to the Department and its insurance carrier.

**MINIMUM QUALIFICATIONS**

*An employee in this classification may be designated as a "key responder: and as such shall be required to respond to non-normal working hour emergency operational conditions.*

**Education:** Bachelor's degree, in Civil Engineering

And

**Experience:** One (1) year of water and/or wastewater engineering and personnel management experience

And

**Certificates:** Must possess a valid Professional Engineer License (Civil) in the State of California at time of application

And

Must obtain and maintain a State of California Department of Public Health Water Distribution Operator Grade D2 Certificate and a Water Treatment Operator Grade T2 within 36 months of the hire date

### **NECESSARY SPECIAL REQUIREMENTS**

Must be able to respond to call-outs or emergencies including being on-call.

Possession of a valid California Class "C" driver's license is required upon application. NOTE: For out-of-state applicants, a valid driver's license is required and a valid California driver's license is required within ten (10) days of appointment (CA Vehicle Code 12505c).

### **PHYSICAL TASKS AND ENVIRONMENTAL CONDITIONS**

Work involves exposure to potential physical harm, hazardous chemicals and infectious disease. There is frequent need to stand, sit, stoop, walk and perform other similar actions during the course of the workday.

Incumbents require sufficient mobility to work in a variety of environmental and weather conditions; to climb ladders daily; to transport materials and supplies weighing up to 50 pounds; Must be able to see in the normal visual range with or without correction with vision sufficient to read small print, computer screens and other printed documents. Must be able to hear in the normal audio range with or without correction. Employee accommodations for physical or mental disabilities will be considered on a case-by-case basis.

### **CAREER LADDER**

**From:** Senior Engineer

**To:** Engineering Manager

#### **Job Description:**

BOWC Approved: 12/11/01

Revision Approved: 6/16/09

#### **Testing Standards:**

Open/Promotional/Supplemental Application/Civil Service Oral

12/11/01

