

Central Marin Sanitation Agency  
1301 Andersen Drive  
San Rafael, CA 94901  
415.459.1455 FAX: 415.459.3971

## **ASSISTANT/ASSOCIATE ENGINEER**

### **SUMMARY**

Under direction of the Senior Engineer, performs engineering, project management, construction management and other engineering or technical services for the Agency. Makes calculations, performs design work, administers contracts, maintains records, and conducts studies regarding capital projects and treatment plant processes and optimization, and performs related work as required.

### **DISTINGUISHING CHARACTERISTICS**

#### **Assistant Engineer**

This is the journey non-registered level class in the engineering series. Incumbent has a good working knowledge of various aspects of civil and environmental engineering as it relates to planning, design, construction, operations and maintenance of wastewater collection, treatment, and disposal systems. The duties involve frequent contact with the public, engineers, consultants, contractors, and other agencies. This class is distinguished from the next higher class of Associate Engineer, which is a registered Professional Engineer position with more complex and responsible duties as described below.

#### **Associate Engineer**

This is the first registered level position in the professional engineering series and incumbent must possess registration as a Professional Engineer. Incumbent performs more complex engineering duties, exercises greater independence in carrying out the duties of the position, performs more comprehensive project management, exercises sound, independent judgment in prioritizing multiple projects, and has program management responsibilities as delegated by the Senior Engineer.

### **ESSENTIAL DUTIES AND RESPONSIBILITIES** Duties include, but are not limited to the following:

- Acts as project manager on specified Agency projects: leads intra-Agency project teams; prepares engineering designs, drawings, specifications, contracts, plans and bid documents; analyzes bids; recommends consultants and contractors; reviews contract submittals; and negotiates and prepares changes in construction contracts.
- Acts as construction manager on specified Agency projects: conducts and documents onsite inspections; makes design changes in the field; reviews and recommends approval of progress payments; and prepares or approves as-built record drawings.
- Plans and designs modifications to a variety of wastewater facilities; identifies, analyzes, and evaluates alternatives, and makes recommendations.
- Analyzes treatment plant, collection system, pump stations, and processes: researches new technologies, products, equipment, codes and regulations; evaluates alternatives, prepares recommendations and written reports.
- Provides engineering and technical support to other Agency teams and departments.
- Administers the Agency's cathodic protection program, marine outfall mudline and diffuser solids monitoring program, and coordinates contacts with Underground Service Alert (USA).
- Represents the Agency in contacts with groups, organizations, representatives of other agencies, professional groups, and the public.
- Establishes and maintains positive working relationships with Agency management and staff, other agencies, contractors and consultants, and the public.

- Participates in special projects as assigned.
- Maintains accurate records and files, including electronic and paper record drawings.
- Prepares a variety of accurate and effective correspondence, reports, procedures and other written materials.
- Schedules, develops, manages bidding and makes award recommendations, calculates escalation, and negotiates extension of assigned administrative procurement contracts.

## **SUPERVISORY RESPONSIBILITIES**

These positions have no supervisory responsibilities. Both positions will act as team leader for various project teams, and as such may coordinate or oversee the work of other Agency support staff, and may supervise or oversee the work of consultants and/or contractors on a project- or day-to-day basis.

## **QUALIFICATIONS**

To perform this job successfully, an individual must be able to perform each essential duty satisfactorily. The requirements listed below are representative of the knowledge, skill, and/or ability required.

## **EDUCATION**

Bachelor's degree (B.S.) from four-year ABET-accredited college with major coursework in Civil, Mechanical, Environmental or Sanitary Engineering. Graduate degree in Environmental/Civil Engineering desirable.

## **EXPERIENCE**

### **Assistant Engineer**

One to two years' experience in a water treatment or wastewater treatment setting is desirable. Experience operating a Computer Aided Design (CAD) system, hydraulic analysis software, and project scheduling programs is desirable. The Assistant Engineer class is flexibly staffed with the Associate Engineer. An incumbent Assistant Engineer may advance to Associate Engineer after gaining five (5) years total of related work experience, one year of which includes of project management; and demonstrating proficiency at the Assistant Engineer level.

### **Associate Engineer**

Four years increasingly responsible professional engineering experience, including at least one year of design and project leadership responsibilities, is required. Experience with wastewater treatment is highly desirable. Experience operating a Computer Aided Design (CAD) system, hydraulic analysis software, and project scheduling programs is desirable.

## **INTERPERSONAL SKILLS**

Ability to interact with others (co-workers, supervisors, subordinates, vendors, and members of the public) in a professional manner; to accept constructive criticism from supervisors, peers, and subordinate employees; to recognize the need for, and to seek, assistance or clarification as needed; to work independently; to handle work-related stress in a professional manner; to prioritize assignments and meet deadlines; to prevent personal problems from adversely impacting work for self or others; to arrive at work as scheduled and to work the hours as agreed upon and scheduled.

## **LANGUAGE SKILLS**

Ability to read, analyze, and interpret general business periodicals, professional journals, technical procedures, or governmental regulations. Ability to write reports, business

correspondence, and procedure manuals. Ability to effectively present information and respond to questions from groups of managers, clients, customers, and the general public.

## **MATHEMATICAL SKILLS**

Ability to carry out routine Civil and/or Environmental Engineering calculations involving advanced mathematical concepts such as exponents, logarithms, quadratic equations, analytical and plane geometry, permutations, frequency distributions, and determination of test reliability and validity.

## **REASONING ABILITY**

Ability to define problems, collect data, establish facts, and draw valid conclusions; to interpret an extensive variety of technical information in mathematical or diagram form and deal with a variety of abstract and concrete variables; to apply principles of logical or scientific thinking to a wide range of intellectual and practical problems; ability to deal with verbal and nonverbal symbolism such as formulas, scientific equations, graphs, etc.

## **CERTIFICATES, LICENSES, REGISTRATIONS**

Must possess a valid California Class C driver's license, have a satisfactory driving record and continue to meet CSRMA driving standards. Possession of an Engineer-In-Training Certificate is required for an Assistant Engineer. Registration as a Professional Engineer in the State of California is required for an Associate Engineer. Failure to maintain these standards may result in loss of employment.

## **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 talk or hear in person, on the telephone, or on the radio. The employee is frequently required to walk, to use hands to finger, handle, or feel, and to sit. The employee is occasionally required to stand, to reach with hands and arms, to climb or balance, and to stoop, kneel, crouch, or crawl.

The employee must occasionally lift and/or move up to 25 pounds. Specific vision ability required by this job includes the ability to see clearly at 20 inches or less, at 20 feet or more, to judge distances and spatial relationships to see objects where and as they actually are, and to adjust the eye to bring an object into sharp focus.

## **WORK ENVIRONMENT**

While performing the duties of this job, the employee is occasionally exposed to: wet and/or humid conditions, outdoor weather conditions, moving mechanical parts, fumes or airborne particles, toxic or caustic chemicals, the risk of electrical shock, or to vibration. The noise level in the work environment is usually moderate, with occasional exposure to loud equipment.

## **SPECIAL REQUIREMENTS**

There are no special requirements for this job.

## **RIGHT TO WORK DOCUMENTATION**

Before being hired, all new employees will be required to show documentation as proof of authorization to work in the United States.

**Job Title:** Assistant/Associate Engineer  
**Department:** Engineering  
**Reports To:** Senior Engineer  
**FLSA Status:** Assistant/Associate: Non-Exempt  
**Revised Date:** January 2007