

THE CITY OF LOS ANGELES



CIVIL SERVICE COMMISSION

**CLASS SPECIFICATION**

6/14/07

**SENIOR ENVIRONMENTAL ENGINEER, 7874**

**Summary of Duties:** Performs difficult and responsible professional environmental engineering work in conducting research and planning studies and in supervising personnel engaged in the preparation of plans, specifications, estimates, designs and reports for solid waste disposal or water quality service projects; assists in the directing and managing of technical engineering, operating, and maintenance activities of environmental engineering divisions and wastewater treatment plants, evaluates their environmental impact, and assists in the formulation of administrative policies; or may serve as the administrative and technical head of a division within a department or in the Bureau of Sanitation or Bureau of Engineering; and does related work.

**Distinguishing Features:** Responsibility for the performance of more difficult administrative and technical engineering duties distinguishes the Senior Environmental Engineer from the Environmental Engineer. Assignments are primarily concerned with the engineering and administrative problems relating to the collection, treatment and disposal of municipal wastes or to water treatment and water quality control, pollution prevention and related environmental concerns.

A Senior Environmental Engineer receives assignments in general terms; delegates detail to subordinates; and is concerned with the supervisory or interpretational aspects of engineering and administrative problems and projects as well as their environmental impact. An employee in this class usually discusses non-routine problems with the division head, but assigns, directs, reviews, and prepares reports on the work after basic decisions are made.

**Example of Duties:**

- Normally acts as a technical and staff assistant to a Principal Environmental or Principal Civil Engineer;
- Advises management relative to the engineering and economic phases of current and proposed methods, procedures and equipment;
- Represents Department or Bureau management and the City in conferences with other engineering groups, organizations, companies, or government agencies concerning critical environmental issues;
- Coordinates work performed by other City bureaus and departments to provide facilities to implement municipal environmental or water quality service projects;
- Analyzes and predicts the environmental consequences of waste generation, pesticides, and herbicides on water quality and water supply;
- Assists in the preparation of technical and other matters for publication;
- Makes recommendations including plans for improvements, extensions, and changes of municipal environmental services or water quality and treatment systems to meet immediate needs and probable future requirements of the City;

- Prepares testing programs and serves as project leader for investigations concerning the improvement of systems or processes and methods of repair, odor and corrosion elimination control, development of protective measures for structures, and determination of optimum methods of operations and maintenance;
- Supervises the design and plans for the operation of landfill disposal sites;
- May occasionally be assigned to other duties for training purposes or to meet technological changes or emergencies.

### **Qualifications**

#### **Knowledge of:**

- Municipal water supply and waste collection, treatment and disposal activities;
- Wastewater treatment, combustible and noncombustible rubbish, and land reclamation facilities;
- Equipment, chemicals, and processes of collection and treatment of domestic water supply and municipal wastes;
- Technological developments and sources of information in the field of environmental engineering;
- Soil mechanics as applied to environmental landfills;
- Methods of odor, corrosion, pollution, vector and erosion control;
- Engineering and environmental requirements and restrictions regarding water supply and waste disposal laws and regulations;
- Engineering economics and financing of municipal environmental service projects;
- Principles of hydraulics as applied to the flow of fluids;
- Interaction between air pollution abatement, water quality, waste generation and land use;
- Interpretation of laboratory data for water quality control and soil and effluent analysis;
- Administrative problems encountered in large environmental organizations;
- Laws and regulations related to equal employment opportunity;
- Effect of pesticides and herbicides use on water quality and supply;
- City personnel rules, policies and procedures.

#### **Ability to:**

- Evaluate difficult engineering data and reports for technical soundness and economic feasibility;
- Prepare clear, comprehensive, and concise studies, plans and reports;
- Represent the City in conferences, hearings and meetings;
- Deal tactfully and effectively with government officials, employees and the public;
- Plan, direct, and coordinate a comprehensive environmental engineering research and control program.

**Requirements:** Two years of environmental engineering experience in a class at the level of Environmental Engineer is required.

**Registration:** Registration as a Professional Engineer with the California State Board of Registration for Professional Engineers and Land Surveyors is required.

Certification as a Grade V Wastewater Treatment Plant Operator by the State of California Water Resources Control Board may be required prior to appointment for certain positions.

**License:** A valid California Driver's License is required.

**Physical Requirements:** Strength to perform average lifting of less than five pounds and occasionally over 15 pounds; good hearing and speaking ability; and good eyesight.

Persons with disabilities may be able to perform the essential duties of this class with reasonable accommodation. Reasonable accommodation will be evaluated on an individual basis and depends in part, on specific requirements for the job, the limitations related to the disability and the ability of the hiring department to reasonably accommodate the limitations.

**As provided in Civil Service Commission Rule 2.5 and Section 4.55 of the Administrative Code, this specification is descriptive, explanatory and not restrictive. It is not intended to declare what all of the duties, responsibilities, and required qualifications of any position shall be.**