THE CITY OF LOS ANGELES



CIVIL SERVICE COMMISSION

CLASS SPECIFICATION

6/14/07

PRINCIPAL ENVIRONMENTAL ENGINEER, 7875

<u>Summary of Duties:</u> 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.

<u>Distinguishing Features:</u> Responsibility for the performance of more difficult administrative and technical engineering duties distinguishes the Principal Environmental Engineer from the Senior 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 Principal Environmental Engineer serves as the administrative and technical head of a division within a department or in the Bureau of Sanitation or Bureau of Engineering. An employee in this class makes decisions and recommendations that are recognized as authoritative and have far reaching impact on operating, maintenance, engineering, and related activities. These division assignments involve a high order of professional engineering and administrative responsibility.

Example of Duties:

- Analyzes and evaluates theoretical and other environmental systems for possible applicability to the City's wastewater and refuse environmental systems;
- Manages research projects, studies, and investigations pertaining to control, operation, maintenance, repair, and testing improvements, alterations, and changes in existing facilities, controls, and operations;
- Administers the fiscal matters of a Division, including the preparation of annual budget requests;
- Normally directs a group of professional engineers and technical staff through the supervision of several Senior Environmental Engineers;
- 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, polices 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.

<u>Requirements:</u> Two years of environmental engineering experience in a class at the level of Senior 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.

<u>Physical Requirements:</u> 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.