

THE CITY OF LOS ANGELES



CIVIL SERVICE COMMISSION

CLASS SPECIFICATION**6/14/07****ENVIRONMENTAL ENGINEERING ASSOCIATE, 7871**

Summary of Duties: Performs professional environmental engineering work in connection with water supply, water quality control, solid waste and wastewater collection, disposal and treatment, and ionizing radiation; conducts engineering, planning and research studies in connection with water and solid resources related activities; coordinates construction and operations of water and wastewater treatment and solid waste facilities; and does related work.

Distinguishing Features: An Environmental Engineering Associate I is the normal entry level to the class. Employees at this level usually have little, if any, experience or special training. They initially perform the less complex professional engineering work under close supervision while learning and assisting in a variety of routine duties. As employees become more experienced, they may work independently and may be responsible for one or more large projects. Positions at this level are three-year temporary training positions under Civil Service Rule 5.30. Employees with two years of full-time paid City experience as an Environmental Engineering Associate I and an Engineer-in-Training (EIT) Certificate will automatically promote to Environmental Engineering Associate II.

Employees at the Environmental Engineering Associate II level perform journey level engineering work requiring a working knowledge of engineering skills. Individuals at this level usually work independently, receive instructions in general terms, and may be responsible for one or more major City projects having wide impact and significant costs. Employees may serve as a lead over a small group of lower level employees.

Employees at the Environmental Engineering Associate III level may supervise, or may serve as a lead over a small group of employees, or as a project manager, or as a project engineer involved in work that is technically complex and requires considerable experience, skill and engineering knowledge. Two years of full-time paid professional experience at the level of Environmental Engineering Associate II and registration as a professional engineer with the California State Board of Registration for Professional Engineers is required for advancement to this level.

Employees at the Environmental Engineering Associate IV level are non-supervisory technical experts, who shall maintain the skills and expertise necessary to remain at this higher paygrade level. They may conduct extensive research into new technical developments and evaluate their suitability for City use, may prepare standards for technical design, may develop and conduct training for other employees about new procedures and techniques, or may act as an internal consultant to other employees on very difficult issues. These positions are designated by Department Management according to their Department's needs. Some positions require registration as a professional engineer with the California State Board of Registration for Professional Engineers, as determined by department management.

Example of Duties:

- Makes engineering investigations in connection with the maintenance and improvement of water quality, correction of cross-connection problems and environmental conditions of water storage facilities;
- Investigates complaints of water conditions which affect manufacturing processes;
- Evaluates laboratory tests of fresh water, ocean water, wastewater, landfill gas, and ambient air samples;
- Recommends solutions to odor and corrosion problems;
- Makes engineering investigations, feasibility studies and surveys of health and environmental problems, including recommendations for improvements in the collection, treatment and disposal of liquid and solid wastes;
- Helps develop plans and designs for future water reclamation and water treatment projects and other treatment facilities;
- Serves as a consultant to sub-professional personnel engaged in related activities;
- May supervise, coordinate and direct the activities of a small group of professional and nonprofessional employees engaged in the design, construction and start-up of water, wastewater, and solid waste treatment facilities and in the investigation and gathering of data of conditions affecting public health, the environment, the purity and quality of the City water supply, and liquid and solid waste collection, treatment and disposal;
- Evaluates the performance and efficiency of wastewater treatment operations and initiates routine changes to optimize operations;
- May supervise professional engineering personnel engaged in environmental engineering studies of piping systems and installation of back flow prevention devices to protect water system purity, and studies of chlorination of the water systems;
- Leads the investigation of consumer complaints or inquiries on water quality;
- Leads the development of plans for water reclamation and future water treatment needs;
- May coordinate the activities of technical and non-technical persons involved in treatment facility construction, maintenance and operation;
- Evaluates the performance efficiency of gas collection systems at solid waste landfills and initiates routine changes to optimize operations;
- Appears as a witness in court cases, participates in hearings in highly technical and involved cases of violations where corrective measures require major modifications to buildings, structures, systems, methods and/or plant equipment;
- May occasionally be assigned to other duties for training purposes or to meet technological changes or emergencies.

Qualifications**Knowledge of:**

- Environmental engineering, environmental and public health principles applicable to water supply, water pollution control, liquid and solid waste collection, wastewater treatment and disposal, plumbing, water and waste flow hydraulics, cross-connections, back flow and siphonage;
- Chemistry, bacteriology, environmental, water and environmental biology, botany, odors, gases, fumes, dust and theoretical epidemiology as related to water and waste treatment;
- Technological developments and sources of information in the field of environmental engineering;

- Principles of water and wastewater treatment processes;
- Federal, State and local environmental, building and planning regulations, codes and laws applicable to wastewater and solid waste processing and water quality;
- Economic and practical aspects of environmental engineering problems involved in wastewater treatment and disposal, water supply and solid waste management;
- Mechanical and electrical fundamentals related to treatment plant equipment and functions;
- Provisions and requirements for grant application and receipt.

Ability to:

- Prepare maps, graphs, charts, diagrams, plans and sketches;
- Write technically clear and concise reports;
- Apply general engineering principles to specific problems and make efficient use of the sources of engineering information;
- Deal tactfully with employees, representatives of other agencies and the public;
- Make effective oral presentations to groups.

Requirements: Graduation from a recognized four-year college or university with a degree in engineering, which includes at least 12 semester units or 18 quarter units of sanitary or environmental engineering courses; **OR**

Possession of a valid Engineer-in-Training Certificate recognized by the California State Board of Registration for Professional Engineers.

Appointment will be made to temporary training positions in accordance with Section 5.30 of the Rules of the Board of Civil Service Commissioners, for a maximum duration of three years. In order to successfully complete the temporary training period, new appointees must obtain their Engineer-In-Training (EIT) Certificate within three years. New appointees who do not successfully complete the temporary training period will be terminated from the class.

License: A valid California driver's license may be required prior to appointment.

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 individual basis and depends in part, on the 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.