



## CLASS SPECIFICATION

Class Code: 3038  
Date Est: 3/2001  
Last Rev:  
Last Title Chg:  
FLSA: Exempt

### SENIOR ENVIRONMENTAL ENGINEER

#### **DEFINITION**

Under direction, supervises technical and support staff in assigned program, performs a broad range of engineering duties requiring the application of public health, environmental and civil engineering principles, practices and theories; evaluates proposed and existing projects, facilities and developments for compliance with public health and environmental statutes, ordinances, codes and regulations; and performs related work as required.

#### **EXPERIENCE AND TRAINING REQUIREMENTS**

A bachelor's degree from an accredited college or university in civil engineering, environmental engineering or a closely related field, plus one year of professional engineering experience in the specified option; OR an equivalent combination of education and experience.

#### **LICENSE OR CERTIFICATE**

A valid driver's license is required at the time of appointment.

#### **DISTINGUISHING CHARACTERISTICS**

This is the supervisory level in the Environmental Engineer class series. This class is distinguished from Environmental Engineer II by its responsibility for an assigned program area, including supervision of technical and support staff.

#### **SUPERVISION EXERCISED**

Exercises direct supervision over technical and support staff.

#### **EXAMPLES OF DUTIES** *(The following is used as a partial description and is not restrictive as to duties required.)*

Supervise assigned technical and support staff, including assist in staff selection; provide staff training in proper work methods and techniques; assign and review work; conduct performance evaluations; implement discipline and conflict resolution procedures when necessary.

Conduct evaluations, office and field reviews of projects and developments such as subdivisions, parcel maps, construction projects, grading permits, individual residences, variances, special use permits, structure moving, on-site sewage and liquid waste disposal facilities, trailer and mobile home parks, hotels and motels, institutions, swimming pools and spas, drinking water supply systems, waste management facilities and systems, air pollution sources, noise and odor sources and similar construction and facilities to determine compliance with applicable environmental and public health laws, rules and regulations.

Make complex computations and calculations regarding the design of pollution control systems and industrial processes (water, wastewater or air) to determine actual and projected emission rates and compliance with regulatory requirements.

Advise developers, contractors, and business operators on remedial measures necessary for compliance by determining the effectiveness of control technology currently in place and recommending changes necessary to obtain compliance.

Collect samples; test and analyze data to determine if facilities meet air, water and/or wastewater pollution control requirements.

Write reports and correspondence; draft environmental regulations by performing necessary research to assess feasibility of proposed standards to present recommendations to interested parties.

Act as an expert witness on environmental engineering issues by providing information to courts, elected boards, councils, commissions, and advisory boards.

Make presentations to Federal, State and local agencies, elected officials, special interest groups, business and industry, community organizations and individuals to promote awareness and understanding of programs, services, policies and regulatory requirements.

Under direction of Registered Engineer, plan, design, and administer contracts for various public works projects such as potable and reclaimed water distribution systems, wastewater facilities, sewers, and flood control.

Review subdivision plans to ensure compliance with tentative map conditions and applicable codes and County standards.

Review design and specifications for public works projects and private projects such as pumps, wells, storage tanks, lift stations, parks, office buildings, water and sewer improvements to ensure compliance with county codes.

Check plans for well drilling and determine compliance with applicable standards and regulations to issue permits.

Review submittals, field reports, and laboratory testing results for compliance with material and equipment specifications.

Consult with professional engineers on the operation and maintenance of water and sanitary sewer systems; review engineering construction drawings for water systems; review and recommend issue or denial of permits, determining if proposed facilities meet requirements.

Review subdivision plans to ensure compliance with tentative map conditions and applicable codes and County standards.

Perform contract and field management of water resources capital projects.

Prepare trend graphs and models, using computer software to perform engineering calculations; record and analyze data by developing and maintaining databases to predict ambient air pollution levels.

## **JOB RELATED AND ESSENTIAL QUALIFICATIONS**

**Full Performance** *(These may be acquired on the job and are needed to perform the work assigned.)*

### **Knowledge of:**

Organizational structure of Washoe County related to programs, activities, and functions of assigned option.

Departmental/divisional policies, practices and procedures.

Principles of supervision.

Federal, state and local laws, statutes, codes, regulations and standards pertaining to assigned option.

Terms and acronyms commonly used in the assigned function.

Management information systems and software programs used in the assigned area.

**Ability to:**

Perform a wide variety of difficult and complex environmental engineering assignments.

Make effective presentations using visual aids and other communication tools.

Select, supervise, and evaluate the performance of assigned staff.

**Entry Level** (*Applicants will be screened for possession of these through written, oral, performance or other evaluation methods.*)

**Knowledge of:**

Environmental engineering instrumentation and testing procedures.

Methods and techniques of design, construction, and maintenance of public works projects.

Engineering mathematics, including calculus, trigonometry, geometry, and algebra.

Engineering practices and principles as applied to design, construction, and operation of water and wastewater capital improvement projects.

Hydraulics, hydrology, geology, water and wastewater collection, treatment, distribution, reclamation, disposal, and flood control.

Soil mechanics, bacteriology, and water chemistry.

Engineering practices and principles as applied to environmental health.

Sources of air pollutants and their properties

Principles of air pollution control technology.

**Ability to:**

Analyze and interpret technical reports, graphs, charts, and drawings.

Perform complex engineering calculations.

Interpret and apply laws, codes, regulations, policies, and procedures pertaining to a variety of environmental health and pollution control programs.

Collect environmental samples.

Answer public inquires from developers, contractors, engineers, various agencies, and the general public on a variety of topics. Coordinate with State and/or Federal agencies on the implementation and enforcement of new regulations or the approval of public works projects.

Operate a personal computer and use a variety of software programs.

Write correspondence, narrative reports and other documents.

Communicate orally in a clear, concise manner.

Establish and maintain effective working relationships with those contacted in the course of work.

**SPECIAL REQUIREMENTS**

*Essential duties require the following physical skills and work environment.*

Ability to work in a standard office environment. Ability to lift and move objects weighing up to 50 lbs. Ability to use office equipment including computers, copiers, telephones, and FAX machines. Ability to tolerate occasional exposure to the elements, dust, grease, chemicals, and potential mechanical hazards. Ability to occasionally use protective devices such as masks, goggles, gloves, etc.

*This class specification is used for classification, recruitment and examination purposes. It is not to be considered a substitute for work performance standards.*

Approved WERCCS Job Evaluation Committee

Date March, 2001