COUNTY OF SOLANO

CIVIL ENGINEER - ENVIRONMENTAL

DEFINITION

Performs a broad range of complex, professional engineering work requiring the application of public health, environmental and civil engineering principles, practices and theories.

CLASS CHARACTERISTICS

This is the fully qualified professional level in the Civil Engineer-Environmental series and is characterized by the responsibility for performing specialized engineering duties that relate to controlling environmental pollutants and public health hazards. This class is distinguished from Environmental Health Supervisor in that the latter has responsibility for supervising a major work unit in the Environmental Health Division of the Environmental Management Department.

SUPERVISION RECEIVED AND EXERCISED

Receives direction from the Environmental Health Supervisor.

Acts as lead worker to field staff engaged in environmental engineering activities.

EXAMPLES OF DUTIES –Duties may include but are not limited to the following:

Reviews engineering reports and specifications regarding the remediation of contaminated soil and ground water sites; evaluates reports of soil and ground water degradation and pollution resulting from leaking underground tanks; makes recommendations for the elimination of tanks; reviews the most difficult and complex underground storage tank monitoring plans for compliance with State laws and regulations; reviews reports and investigations submitted to the Environmental Management Department by other professionals for compliance with laws and regulations.

Conducts detailed hydrogeological studies to determine environmental contamination from hazardous substances.

Develops and implements site assessment and mitigation policies and procedures; develops, implements and maintains procedures and policies for investigating unauthorized releases of hazardous substances from underground storage tanks.

Acts as liaison; consults with other agencies and groups to coordinate investigations and site mitigations.

May conduct difficult and complex plan reviews and inspections of new and existing underground storage tank systems; leads the work of field staff in conducting routine investigations of unauthorized releases.

Provides training to hazardous materials professionals and industry operators on hydrogeological management.

Evaluates solid waste facility design, operations, closure and post-closure maintenance plans for compliance with regulations and environmental requirements.

Evaluates and reviews sewage disposal systems for compliance with Regional Board Basin Plans and local ordinances.

Compiles data for other regulatory agencies; prepares a variety of reports, technical studies and documents.

Maintains professional knowledge in applicable areas and keeps abreast of changes in job-related rules, statutes, laws and new business trends; makes recommendations for the implementation of changes; reads and interprets professional literature; attends training programs, workshops and seminars as appropriate.

JOB RELATED AND ESSENTIAL QUALIFICATIONS

Knowledge of:

Considerable knowledge of principles and practices in civil engineering and surveying; mathematics, physics and chemistry applied to Civil Hydrological and Environmental engineering.

Principles and practices of engineering, geology, hydrology and hydrogeological exploration and assessment with strong emphasis in hazardous substances and water quality.

Principles and practices of site mitigation and aquifer restoration technologies.

Laws and regulations regarding hazardous substances and hazardous wastes.

Underground storage tanks, well drilling, water quality protection relating to hazardous materials management and environmental health.

Skill to:

Operate office equipment including a personal computer, copy and fax machines and printers.

Ability to:

Plan, organize and implement highly specialized technical projects.

Interpret and apply laws regulations and policies; analyze and interpret technical data regarding leaking underground tank sites, hazardous materials or integrated waste operations.

Develop and implement operational procedures.

Supervise the work of others engaged in environmental engineering activities.

EXPERIENCE AND EDUCATION/TRAINING

Experience:

Three years of environmental or civil engineering experience with an emphasis on hazardous substances and water quality; at least one year of which should be at a level comparable to Entry Level Civil Engineer.

Education/Training:

Bachelor's degree from an accredited college or university in Civil or Environmental Engineering is required.

SPECIAL REQUIREMENTS

Possession of a valid license as a Registered Civil Engineer or a Professional Engineer in the State of California by the California State Board of Registration for Professional Engineers is required.

Possession of or ability to obtain a valid Class C California driver's license may be required.

SUPPLEMENTAL INFORMATION

Independent travel is required.

Incumbents may be required to work outside of normal business hours.

ADA COMPLIANCE

Physical Ability: Tasks require the ability to exert moderate, though not constant physical effort, typically involving some combination of climbing and balancing, stooping, kneeling,

crouching, and crawling, and which may involve some lifting, carrying, pushing and/or pulling of objects and materials of moderate weight (12-20 pounds).

<u>Sensory Requirements:</u> Requires the ability to recognize and identify similarities and differences between shade, degree or value of colors, shapes, sounds, forms, textures or physical appearance associated with job-related objects, materials, tasks or people.

Environmental Factors: Requires the ability to work under conditions where exposure to environmental factors poses a risk of minor injury or illness.

Director of Human Resources

Established Date: January 2001 **Revised Date:** November 2002

BOS Date: June 30, 2003

I:\Classification\Class Specs\ParaProf specs\Civil Engineer Environmental.doc