

## COUNTY OF SOLANO

### GEOLOGIST

#### **DEFINITION**

Performs professional duties related to the analysis, evaluation and interpretation of hydrogeologic conditions affected by contaminant releases from leaking underground fuel storage tanks.

#### **CLASS CHARACTERISTICS**

This is a lead level class that oversees, reviews and makes technical interpretation and prepares directives for the work prepared by other registered professionals and staff. Work supports enforcement of water quality goals of the Porter Cologne and Underground Storage Tank regulations under contract with the State Resources Control Board, Division of Clean Water Program. Incumbents in this single position class are delegated authority and held accountable for evaluating the completeness and compliance of field investigations associated with surface and groundwater contamination from leaking underground storage tanks and spills from above ground facilities. Incumbents are expected to perform their assignments with limited supervision using independent judgment and discretion in establishing work priorities that are consistent with program goals.

#### **SUPERVISION RECEIVED AND EXERCISED**

Receives general supervision from the Hazardous Materials Supervisor.

Provides oversight and technical assistance to other professionals and staff.

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

Reviews technical reports and work plans prepared by registered professionals regarding hydrogeologic investigations and interpretations; interprets geologic technical documentation and investigations prepared by other registered professionals. Reviews geological reports containing drilling logs, description of geological lithologies and groundwater occurrence, quality and gradient. Prepares, reviews and approves geological reports submitted by registered geologists and civil engineers relative to contaminant transport media including soils and groundwater.

Prepares letters, directives and closure documents for responsible parties and other regulatory agencies on the necessity and validity of the proposed and completed work; updates computer databases for Solano County, other regulatory agencies and internal site use.

Conducts site inspections during site evaluation, investigation and cleanup.

Evaluates site condition for conformance with regulations; evaluates the completeness and compliance of field investigations in determining the extent of surface, subsurface, and groundwater contamination.

Evaluates potential for surface, subsurface and groundwater contamination and pollutant movement through subsurface lithology, soil and rock strata.

Prepares hydrogeological evaluations and interpretations for each site with complying graphs, maps, photographs, and summaries to demonstrate analysis.

Performs and evaluates field measurements to determine groundwater quality and behavior including but not limited to aquifer tests, soil and groundwater sampling, placement of monitoring wells, reviewing of well logs and other subsurface survey techniques useful in identifying and monitoring the pollution plume.

Conducts meetings with responsible parties, staff and other agencies.

Approves cleanup plans and evaluates recommendations for the design and construction of facilities for cleanup.

Prepares written and oral reports for department management and for other government agencies on the status of various cleanup projects in progress.

Interacts with a variety of professional and technical persons associated with various cleanup projects; uses tact and judgment in order to obtain compliance with enforcement documents issued by other agencies.

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 geological principles including hydrogeology, environmental geology, physical geology and soil chemistry.

Federal, state and local laws, rules and regulations relation to underground and aboveground storage tanks and facilities.

Subsurface survey, remediation and investigation methods.

**Skill to:**

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

Drive a motor vehicle.

**Ability to:**

Ability to conduct field investigations to determine if there is surface and/or groundwater contamination.

Read, understand and interpret geological reports submitted by registered geologists, engineering geologists and civil or geotechnical engineers.

Analyze evaluations and investigations to assess the risk factors associated with various options and make appropriate recommendations.

Prepare clear and concise written and oral opinions and make an appropriate recommendations.

Establish effective working relationships with peers, supervisors, subordinates, co-workers, the general public, owners of facilities judged to be out of compliance with the law, and others who have an interest in hazardous materials management.

Attend public meetings and present comments and recommendations.

Use tact and judgment to obtain compliance with enforcement documents issued by other agencies.

Work nights, weekends, holidays, and be available for on call assignments.

**EXPERIENCE AND EDUCATION/TRAINING**

**Experience:**

Three years of professional experience as a geologist with an emphasis on pollution site assessment and mitigation.

**Education/Training:**

A Bachelor's degree is required from an accredited college or university in geology or engineering geology.

### **SPECIAL REQUIREMENTS**

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

Possession of a valid California registration as a Geologist, Registered Engineering Geologist or Registered Hydrogeologist is required.

Completion of 40 hour OSHA HazMat training is preferred.

Must pass a physical exam as a condition of hire.

### **SUPPLEMENTAL INFORMATION**

Independent travel is required.

Incumbents may be required to perform work in the field.


Incumbents may be required to work outside normal business hours.

### **ADA COMPLIANCE**

**Physical Ability:** Tasks may 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).

**Sensory Requirements:** 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.

  
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Director of Human Resources

**Established Date:** June 2000

**Revised Date:** June 2002

**BOS Date:** June 30, 2003

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