



GEOLOGIST

DEFINITION

Under direction, performs technical soil, geologic, ground water, surface water, and naturally occurring asbestos data collection and analysis, and assesses environmental impacts resulting from development proposals; provides technical guidance relating to underground storage tank remediation activities and alternative septic system design; and performs related duties as assigned.

SUPERVISION RECEIVED AND EXERCISED

Receives direction from the Environmental Management Program Manager. Exercises no direct supervision over staff.

CLASS CHARACTERISTICS

This is a single position, journey-level professional classification. This position is responsible for gathering, analyzing, disseminating, and reporting on ground water and surface water data, geological and geophysical mapping, geologic hazards identification. Work assignments are varied and may be comprised of field surveys, research studies, laboratory analyses, technical report review, data processing, technical writing, map compilation, and mineral resource studies. This position applies specialized technical knowledge, performs assignments independently, and exercises judgment and initiative. The incumbent receives occasional instruction or assistance as new or unusual situations arise and is fully aware of the operating procedures and policies.

EXAMPLES OF TYPICAL JOB FUNCTIONS (Illustrative Only)

- Performs a variety of professional geological duties related to the sampling and analysis of the type, classification, characteristic of soils and groundwater at the Union Mine Disposal site and other locations as directed.
- Provides technical guidance to staff on soils, groundwater, surface water, geologic, and seismic issues associated with comprehensive plans and individual projects.
- Conducts investigations, field studies, reviews or evaluates documents, and prepares or provides recommendations for written analysis reports.
- Evaluates site conditions for conformance with regulations; reviews data collected during investigations to determine the extent of surface and groundwater contamination as related to underground storage tank remediation activities and other sites as necessary.
- Interacts with a variety of professional and technical individuals associated with various cleanup projects.
- Reviews remediation plans and evaluates recommendations for the design and construction of facilities for potential mitigation measurements regarding various projects.
- Assists in the preparation of Initial Studies and Negative Declarations, and works with consultants regarding the preparation of complex Negative Declarations or Environmental Impact Reports.
- Provides technical guidance to staff on experimental/alternative septic system designs and monitoring systems.
- 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.

- Reviews and interprets geological reports submitted by registered geologists, engineering geologists, civil or geotechnical engineers, and other registered and nonregistered professionals.
- May perform work in the CUPA program.
- Performs related duties as assigned.

QUALIFICATIONS

Knowledge of:

- Modern geological principles including environmental geology, physical geology, and soil chemistry.
- Applicable federal, state, and local laws, rules, and regulations relating to environmental geologic and seismic issues, landfill, and underground storage.
- The National Environmental Policy Act and California Environmental Quality Act and California land use and planning laws.
- Principles and practices of field investigation procedures and strategies to determine surface contamination and groundwater flow.
- Containment transport.
- Geological reports submitted by registered geologists, engineering geologist, and civil or geotechnical engineers.
- Database management and statistical analysis.
- Principles and techniques for working with groups and fostering effective team interaction to ensure teamwork is conducted smoothly.
- Techniques for providing a high level of customer service by effectively dealing with the public, vendors, contractors, and County staff.
- The structure and content of the English language, including the meaning and spelling of words, rules of composition, and grammar.
- Modern equipment and communication tools used for business functions and program, project, and task coordination.
- Computers and software programs (e.g., Microsoft software packages) to conduct, compile, and/or generate documentation.

Ability to:

- Perform assignments with limited supervision, using independent judgment and discretion in establishing work priorities that are consistent with program goals.
- Conduct field inspections, interpret and report on pertinent data, and make effective recommendations.
- Evaluate and investigate risk factors associated with various geologic environments and to make appropriate recommendations.
- Conduct hydrogeological analyses of contaminated sites.
- Understand and interpret geological reports submitted by registered geologists, engineering geologist, and civil or geotechnical engineers.
- Interpret, apply, explain, and ensure compliance with applicable federal, state, and local laws, ordinances, regulations, policies, and procedures.
- Obtain compliance with enforcement documents issued by various agencies.
- Prepare written analysis, evaluations, summaries, recommendations, correspondence, and certify professional geological reports.
- Make sound, independent decisions within established policy and procedural guidelines.
- Understand, interpret, and apply all pertinent laws, codes, regulations, policies and procedures, and standards relevant to work performed.
- Effectively represent the department and the County in meetings with governmental agencies; community groups; various business, professional, and regulatory organizations; and in meetings with individuals.

- Independently organize work, set priorities, meet critical deadlines, and follow-up on assignments.
- Effectively use computer systems, software applications, and modern business equipment to perform a variety of work tasks.
- Communicate clearly and concisely, both orally and in writing, using appropriate English grammar and syntax.
- Use tact, initiative, prudence, and independent judgment within general policy, procedural, and legal guidelines.
- Establish, maintain, and foster positive and effective working relationships with those contacted in the course of work.

Education and Experience:

Any combination of the required experience, education, and training that would provide the essential knowledge, skills, and abilities is qualifying.

Equivalent to a bachelor's degree from an accredited four-year college or university with major coursework in geology, geophysics, or a closely related field;

AND

Two (2) years of professional experience as a Geologist or Geophysicist preferably working on contaminated site assessment, mitigation, soil, or ground hazards.

Licenses and Certifications:

- Possession of, or ability to obtain, a valid California Driver's License by time of appointment and a satisfactory driving record.
- Must be registered as a Professional Geologist or Geophysicist by the California State Board of Registration for Geologists and Geophysicists.
- If assigned to perform CUPA duties, possession of, or ability to obtain, an ICC UST Inspector Certification within six months of employment.

PHYSICAL DEMANDS

Must possess mobility to work in a standard office setting and use standard office equipment, including a computer, to inspect County sites, including traversing uneven terrain, climbing ladders, stairs, and other access points, to operate a motor vehicle, and to visit various County and meeting sites; vision to read printed material and a computer screen; and hearing and speech to communicate in person, before groups, and over the telephone. This is a combination of field and sedentary office classification as standing and walking between work areas and to conduct inspections in the field is required. Finger dexterity is needed to access, enter, and retrieve data using a computer keyboard or calculator and to operate standard office equipment. Positions in this classification occasionally bend, stoop, kneel, reach, push, and pull drawers open and closed to retrieve and file information. Employees must possess the ability to lift, carry, push, and pull materials and objects weighing up to 50 pounds. Reasonable accommodations will be made for individuals on a case-by-case basis.

ENVIRONMENTAL CONDITIONS

Employee partially works in an office environment with moderate noise levels, controlled temperature conditions, and no direct exposure to hazardous physical substances. Employee also partially works in the field with occasional exposure to loud noise levels, cold and hot temperatures, inclement weather conditions, road hazards, vibration, mechanical and/or electrical hazards, and hazardous chemical substances and fumes. Employees may interact with members of the public or with staff under emotionally stressful conditions while interpreting and enforcing departmental policies and procedures.