



**APPROVED BY: THE CHIEF
ADMINISTRATIVE OFFICER**

EFFECTIVE: March 2005

**ASSOCIATE ENGINEERING GEOLOGIST
(REGISTERED/UNREGISTERED)**

Class specifications are intended to present a descriptive list of the range of duties performed by employees in the class. Specifications are not intended to reflect all duties performed within the job.

DEFINITION

To lead, direct, oversee and participate in the work of professional engineering geologist staff in areas related to basin management and protection, flood control, water quality, water production, water storage, water treatment and water distribution facilities and systems; to ensure work quality and adherence to professional codes, standards and District specifications; and to perform a variety of professional services relative to assigned area of responsibility.

DISTINGUISHING CHARACTERISTICS

This is the journey level class in the professional Engineering Geologist series. Incumbents in this class receive direction and exercise independent judgement in performing the full range of complex or difficult work. Employees at this level typically perform as project/program lead and may perform first supervisory level functions. Additionally, incumbents provide review of work for application of sound professional judgement and may exercise full technical and functional supervision for assigned projects and programs. Typical assignments may be in support of field of design, planning, construction, water quality, operation and maintenance related to flood control, water supply and groundwater basin management and protection. For positions that possess registration as a professional geologist, incumbents may be required to assume responsible charge of the review and preparation of geologic plans, specifics, reports or documents for compliance with professional geology standards and principles and stamp and/or sign such work to assume project geologic responsibility.

SUPERVISION RECEIVED AND EXERCISED

Receives direction from higher level supervisory or management staff.

May exercise functional and technical supervision or direct supervision over professional and technical staff.

ESSENTIAL FUNCTION STATEMENTS

Essential responsibilities and duties may include, but are not limited to, the following:

1. Coordinate, oversee, prepare and review the work of staff and consultants engaged in geologic, hydrogeologic, water quality and groundwater basin management studies; participate in and review work associated in the design, planning, construction, operation and maintenance of flood control and water supply facilities and water quality structures; provide training and technical support to assigned project staff.
2. Participate in the preparation of project management plans, project plans, annual work plans, summary reports, project team mission statements, and project objectives, scope, sub-tasks, schedules, budget and resources; prepare project schedules; identify tasks and resources required; monitor project progress and prepare status reports; perform project close out and maintain project files.
3. Coordinate and participate in geology studies and related projects with District staff, outside agencies and consultants; ensure that work performed adheres to professional engineering geology principles, standards, and practices.
4. Oversee and participate in the total planning and design of assigned geologic projects, including development and evaluation of alternatives, determination of alignment, right of way, scope of survey or consultant reports, environmental requirements, permits and agreements.
5. Participate in the preparation, review and administration of consultant and professional services contracts.
6. Log borings and collect samples during soil/groundwater investigations and installation of groundwater monitoring wells.
7. Oversee and participate in inspecting contractor installations to ensure conformity with plans and specifications.

8. Provide technical support during construction of a project including submittal review, requests for information from contractors, interpretation of contract documents and assistance with change orders and claims; participate in preparing final plans and specifications.
9. Represent the District in meetings or presentations to the public, consultants, contractors and other agencies; review and check drawings, plans, computations, specifications, estimates and reports for completeness, accuracy and soundness of applied geologic principles and practices.
10. Review development projects by private interests and other public agencies to determine their impact on the District and develop recommendations.
11. Prepare and review a variety of technical and administrative reports including agenda packets, permit applications and correspondence; oversee and assist in the organization and maintenance of project files.
12. Coordinate and assist in the development of the budget for assigned section, project, program, unit or project.
13. Analyze proposed and current regulations and develop recommendations for compliance and implementations.
14. Develop and maintain databases and computer files; utilize geologic and standard software applications to solve the more complex geologic or hydrogeologic problems and to prepare budgets, project schedules and to monitor project status.
15. Provide technical assistance and information to other District staff and outside agencies; participate in special studies related to assigned areas.
16. Incumbents who possess licensure as a Registered Geologist in the State of California may review or supervise the review of geologic studies, reports, designs and contract documents for compliance with professional geology standards and principles; may be required to assume responsible charge and to stamp their Registered Geologist seal on reports, correspondence, and contract documents as responsible geologist.
17. Provide technical support in resolving geologically related construction contract change orders and claims.
18. Assist in selecting, training, motivating and evaluating professional and technical personnel; provide or coordinate staff training.

19. Perform related duties and responsibilities as assigned.

QUALIFICATIONS

Knowledge of:

Operations, services and activities of a modern geologic, hydrogeologic and water quality analysis program.

Principles and practices of supervision and training.

Advanced principles and practices of engineering geology as applied to flood control, water

supply and water quality projects and appurtenant structures.

Mathematics, economics and statistical analysis as applied to geology.

Principles and practices of seismicity and related seismic hazards and risks.

Methods and techniques of geologic and geodetic surveying.

Methods and techniques of surveillance data analysis.

Principles and practices of project scheduling, management and budgeting.

Occurrence, fate and transport of contaminants in soil, surface water and groundwater.

Various construction methods, materials as applied to wells, borings, geologic instrumentation, foundations and earth and rock structures.

Earthwork and foundation construction methods, materials, specifications and codes.

Modern engineering geology and standard software applications.

Methods and techniques of conducting geologic site investigations and inspections.

Principles and practices of public sector contract administration and management.

Geological, geographic and hydrogeological characteristics of the Santa Clara Valley area.

Professional geology principles, codes and standards.

Pertinent federal, state and local laws, codes and regulations.

Ability to:

Oversee the operations, services and activities of a modern geologic, hydrogeologic and water quality analysis program.

Plan, direct and review the work of assigned staff.

Provide training and technical support to assigned staff.

Coordinate, oversee and conduct hydrogeologic and groundwater basin studies.

Prepare and interpret geologic maps and sections.

Prepare clear, concise and accurate reports and correspondence.

Identify and evaluate geologic hazards.

Review and evaluate technical reports and submittals.

Prepare plans, specifications and estimates for projects within area of assignment.

Set priorities and exercise sound independent judgment within established procedural

guidelines.
Make effective public presentations.
Analyze problems, identify alternative solutions, project consequences of proposed actions and implement recommendations in support of goals.
Research, analyze and evaluate new service delivery methods and techniques.
Interpret and apply federal, state and local policies, laws and regulations.
Communicate clearly and concisely, both orally and in writing.
Establish and maintain effective working relationships with those contacted in the course of work.

Experience and Training Guidelines

Any combination of experience and training that would likely provide the required knowledge and abilities is qualifying. A typical way to obtain the knowledge and abilities would be:

Experience

Two years of professional experience at a level equivalent to that of the Assistant Engineering Geologist II.

Training

Equivalent to a Bachelors degree in geology, engineering geology, hydrogeology or related scientific field.

License or Certificate

Possession of, or ability to obtain, an appropriate, valid California driver's license may be required with determinations made on a case by case basis at the time of job posting.

WORKING CONDITIONS

Environmental Conditions

Indoor environment; some positions require frequent field visits or occasional field assignments of up to a few months; travel from site to site; work closely with others or alone; exposure to electrical and radian energy; irregular work hours; some positions may involve exposure to inclement weather, dirt, dust, noise, chemicals, biological and chemical contaminants and other conditions associated with construction sites, water

treatment plants and urban and remote field conditions.

Physical Conditions

Essential and other important functions may require maintaining physical condition necessary for sitting, walking and standing for extended periods of time; some light to moderate lifting and carrying.