

**COUNTY OF SOLANO**  
**CLASS SPECIFICATION**  
**CIVIL ENGINEER ASSISTANT – ENVIRONMENTAL (ENTRY)**  
**Effective Date of Revision: XX/XX/XX**

**Est. 01/01**

**DEFINITION/CLASS SUMMARY:**

Under ~~general-immediate~~ supervision, incumbents in the class of Engineer Assistant - Environmental performs a broad range of moderately complex, professional engineering work which requires the application of public health, environmental and civil engineering principles, practices and theories; ~~performs related duties as required.~~

**DISTINGUISHING CHARACTERISTICS:**

This is the entry level in the professional 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 the:

- Civil Engineer – Environmental, which in that the latter is assigned more complex projects and manages assigned projects which require exercising independent judgment and initiative.

**SUPERVISION RECEIVED AND EXERCISED:**

- Supervision is provided by an Environmental Health Supervisor.

And

- Employees in this class may provide technical assistance to newly hired engineers and technical level engineering staff.

**EXAMPLES OF ESSENTIAL DUTIES:** This class specification represents the core area of responsibilities; specific position assignments will vary depending on the needs of the department.

~~Depending on assignment, duties may include but are not limited to the following:~~

- ~~Conducts or assists in detailed hydrogeological studies to determine environmental contamination from hazardous substances; reviews engineering reports and specifications regarding the to prevent or remediate remediation of contaminated contamination of~~ 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~~ prevention or abatement of contamination.
- ~~Assists in reviewing underground storage tank groundwater monitoring plans for compliance with State and local laws and regulations and sound engineering; consults practices; consults with other responsible agencies and groups to coordinate compliance, investigations and site mitigations.~~

- ~~Assists in the development and implementation of site assessment and mitigation policies and procedures; conducts professional reviews of reports and investigations submitted to the Environmental Resource Management by other professionals in the field for compliance with applicable laws and regulations.~~
- ~~Assists in the design and/or review of on-site water supply and sewage disposal facilities on County-owned property.~~
- ~~Develops, implements, and maintains procedures and policies for investigation of unauthorized releases of hazardous substances from underground storage tanks.~~
- ~~Civil Engineer – Environmental (Entry)~~ ~~Page two~~
- Assists in and learns to apply principles of specialized professional engineering activity such as controlling environmental pollutants and public health hazards.
- ~~Interacts with public and professional organizations in matters of engineering, geology, hydrogeology and environmental health.~~
- ~~Learns to provide training to hazardous materials professionals and industry operators on hydrogeological management.~~
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## **QUALIFICATION GUIDELINES**

### **Education and/or Experience**EDUCATION AND EXPERIENCE:

- Education: BS degree in geology, hydrology, or environmental or civil engineering and, AND
- Experience: Six months of professional experience in the field of Environmental Engineering with an emphasis in ~~hazardous substances and~~ water quality.

### **LICENSING, CERTIFICATION, AND REGISTRATION REQUIREMENTS:**

- Possession of or ability to obtain a valid Class C California driver's license is required.
- Possession of Engineer-in-Training Certification or a Registered Civil Engineer license in the State of California is required.
- Incumbents shall obtain Registration as a Civil Engineer in the State of California within 4 years from the date of employment. Incumbents of this class will demonstrate necessary knowledge and abilities to be promoted to Civil Engineer – Environmental within 4 years.

**Note:** All licenses, certificates and registrations must be acquired and/or kept current while employed in this class. Failure to do so may constitute cause for personnel action in accordance with Civil Service Rules or applicable bargaining agreement.

### **REQUIRED KNOWLEDGE, SKILLS AND ABILITIES:**

#### **Knowledge/~~Abilities~~ of:**

- ~~Considerable knowledge of M~~modern principles and practices in civil engineering and surveying.

- ~~m~~M Mathematics, physics and chemistry as applied to Civil, Hydrogeological or Environmental engineering; mathematics, physics and chemistry as applied to the field of engineering.
- ~~p~~P Principles and practices of engineering, geology, hydrology and hydrogeological exploration and assessment with a strong emphasis in hazardous substances and water quality.
- ~~p~~P Procedures for addressing complex hydrogeological problems related to ~~hazardous substances~~contaminants in the subsurface environment.
- Principles and practices of site mitigation and aquifer restoration technologies.
- ~~I~~Laws and regulations related ~~to hazardous substances and hazardous wastes; in reference to~~ underground storage tanks, well drilling, water supply systems, landfills, onsite sewage disposal, water quality protection, and others applicable to hazardous materials management and environmental health.

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**Skill and/or Ability to:**

- ~~p~~P Plan, organize and implement highly specialized technical projects with a minimum of supervision.
- ~~a~~A Analyze situations accurately and adopt an effective course of action.
- ~~i~~I Interpret and apply federal, state and local laws, regulations and policies.
- ~~a~~A Analyze and interpret technical data ~~regarding leaking underground tank sites.~~
- ~~p~~P Prepare technical reports.
- ~~d~~D Develop and implement operational procedures.
- ~~m~~M Make decisions and independent judgments.
- ~~e~~C Communicate effectively both verbally and in writing; establish and maintain cooperative working relationships.
- ~~e~~C Collect and analyze data to draw logical conclusions and make appropriate recommendations.
- ~~s~~S Secure cooperation and teamwork among professional and/or support staff.
- ~~u~~U Understand and analyze expenditure reports.

**Civil Engineer – Environmental (Entry)** **Page three**  
**Knowledge/Abilities, (Continued)**

- Maintain accurate records and document actions taken.
- ~~r~~R Research regulations, procedures and/or technical reference materials.
- ~~p~~P Project consequences of decisions.
- ~~w~~W Work effectively with others who have objectives counter to assigned role.

**PHYSICAL REQUIREMENTS:**

- Mobility and Dexterity: Positions in this class typically require stooping, kneeling, reaching, standing, walking, fingering, grasping, feeling (i.e. sense of touch), and repetitive motion.
- Lifting, Carrying, Pushing and Pulling -- Light Work: Employees in this class will be exerting up to 20 pounds of force occasionally and/or up to 10 pounds of force frequently, and/or a negligible amount of force constantly to move objects.
- Vision: Positions in this class require the employee to have close visual acuity, with or without correction, to prepare and analyze data and figures, transcribe, view a computer terminal, read, etc. Positions in this class also requires employees to have depth

perception in order to operate a motor vehicle.

- Hearing/Talking: Positions in this class require the employee to perceive the nature of sounds at normal speaking levels with or without correction, and have the ability to receive detailed information through oral communication. Positions in this class require the employee to express or exchange ideas by means of the spoken word.

#### **WORKING CONDITIONS:**

- Office Work plus Outdoor Work: While most work will be in an office setting, visits to outdoor worksites will require an employee in this class to occasionally work outside and be subject to a variety of weather conditions, walking on uneven terrain, and working around vehicles in operation and around machinery with moving parts.
- Work in an Industrial Area: Employees in this class will often be working in an industrial area and thus will be subject to exposure to moving mechanical parts, electrical currents, toxic agents, fuel, oil, gases, smoke, fumes, odors, dust, and vibrations; employees may be subject to injuries when working with hand and power tools and equipment.
- Traffic Hazards: Employees in this class will be required to operate a vehicle and thus will be subject to traffic hazards while driving.

#### **SPECIAL REQUIREMENTS**

~~Possession of or ability to obtain Engineer-in-Training Certificate is required.~~

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

#### **OTHER REQUIREMENTS:**

- Independent Travel: Incumbents are required to travel independently, for example, to perform work at other work sites, to attend meetings with other County employees, to attend meetings with community organizations, etc.
- Hours of Work: Incumbents may be required to work weekends, holidays, irregular hours, on-call, and after normal business hours.

#### **SUPPLEMENTAL INFORMATION**

~~Independent travel is required.~~

~~Incumbents must be able to perform basically sedentary work.~~

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

#### **CLASS HISTORY AND CLASS INFORMATION:**

- Date Approved by the Civil Service Commission: March 11, 1992
- Date Adopted by the Board of Supervisors: April 14, 1992
- Date(s) Revised: January 10, 2001, October 2000.
- Date(s) Retitled and Previous Titles of the Class: Environmental Engineer (Entry), Civil Engineer – Environmental (Entry)
- Class Code: 352020

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