

DESERT WATER



STAFF ENGINEER Operations Engineering Department

Range: 51
Salary:

JOB DEFINITION: Under general supervision, to do the complex professional, office and field work in civil engineering; and to do related work as required

SUPERVISOR: Operations Engineer/Supervisor

DISTINGUISHED FROM LOWER RANGE POSITION(S):

There are four Engineer levels within the Engineering Operations Department – the primary difference between the licensed Engineers is the scope of required knowledge and experience. Additionally, the Operations Engineer position is a supervisory position and the other Engineer level positions are non-supervisory.

EXAMPLE OF DUTIES:

Under direction of Operations Engineer; Does engineering design, computing, data collection, analysis, evaluation, oral and written reporting, drafting, surveying, office and field project management; performs field engineering; field verifies design conformance of construction; applies surveying theory and practice while performing field measuring, construction staking for structural and earthwork projects; assist with topographic surveys in the field, transfer of digital data and preparation of topographical mapping using compiled data, land and route surveying; assists in the design of Agency facilities including potable water, recycled water and wastewater facility maintenance and capital improvement projects by preparing plans, profiles and cross-sections, making quantity estimates, horizontal and vertical curve alignment computations and establishing tentative grade lines; computes earthwork, makes hydrographic and hydrologic studies; designs simple hydraulic structures and portions of systems; oversees inspection procedures during construction of projects; develops maintenance and data collection procedures for various operational facility components and analyzes data for assessment of related performance and maintenance requirements; prepares and maintains database programs which aid Engineering and Operations departments in streamlining the collection of data for state, local and federal reporting requirements; monitors power billings for Agency facilities as a means of investigating potential facility problems; utilizes computer programs to facilitate pipeline design including developing pipe network systems to predict pipe flow rates and pressures in both steady state and extended period simulations; familiarity with computer aided drafting and design; perform statistical analysis of information by both descriptive and inferential techniques; assist the Operations Engineer with the preparation of construction specifications, contracts and procedures for potable water, recycled water, wastewater and power generation systems; performs financial analysis and prepares cost estimates for capital improvements, maintenance projects, and facility operating costs; responds to customer complaints with regard to water quality, production, and storage related concerns; assists customers with the acquisition of construction water service and new service installation.

QUALIFICATIONS:

Schooling: Possession of a Bachelors of Science degree in Engineering from an accredited college (either civil, electrical or mechanical)

Certification(s): Possession of a valid certificate as a result of successfully completing the Nationally Standardized test for E.I.T.

Experience: any combination of training, experience or education which would likely provide the required knowledge and abilities

License(s): Possession of a valid driver's license issued by the California Department of Motor Vehicles for use of operating Agency vehicles and equipment required in the fulfillment of the job duties for this position, with an acceptable driving record

Knowledge: Basic principals and practices of civil engineering in relation to basic water production, distribution; and wastewater collection and treatment systems; use of computer and various Engineering related programs, such as AutoCad and/or ArcGIS

Ability: Work independently with little direction; maintain a neat and orderly work place; understand and carry out oral and written instruction; establish and maintain effective working relationships with Agency staff and deal tactfully with contractors, developers and the general public

PHYSICAL REQUIREMENTS:

Climbing: yes no **Frequency:** Continual Often Infrequently Never

Examples: Going up and down stairs, ladders, getting into large vehicles, during surveying, etc.

Bending: yes no **Frequency:** Continual Often Infrequently Never

Examples: Lifting boxes, surveying or engineering equipment, etc.

Sedentary/sitting: yes no **Frequency:** Continual Often Infrequently Never

Examples: Sitting at desk, driving or riding in vehicles

Standing: yes no **Frequency:** Continual Often Infrequently Never

Examples: Standing on carpet, pavement, dirt, concrete at work sites or in Agency facilities

Repetitive motion: yes no **Frequency:** Continual Often Infrequently Never

Examples: Use of computer, writing instruments, etc.

Respiratory (requiring use of respirator or face mask) yes no

Examples: When entering reservoirs, misc. agency facilities, as appropriate

WORK ENVIRONMENT:

Generally, work is performed indoors within the Agency Operations Center, which has a heating and air conditioning system. Within the Operations center, there is both overhead lighting and natural light from windows. There is a music/paging system which is on and operating throughout the work day. There are a number of pieces of office equipment that operate within the confines of the Engineering-Operations work areas, including, but not limited to: telephones, computers, computer printers, plotters, and calculators.

On occasion, work (such as surveying or job inspections) will take place outside the Agency Operations Center or at outlying Agency facilities and will take place in all weather conditions, including extreme heat in excess of 110°.

I have reviewed this Job Description with my Supervisor and received a copy.

Employee Signature

Date

Supervisor Signature

Date

The specific statements shown in each section of this job description are not intended to be all-inclusive. They represent typical elements and criteria necessary to successfully perform the job.