Engineering Services.

The Engineering Services Department is responsible for planning, construction management and inspection, and technical engineering for the District’s $47 million 5-Year Capital Improvement Projects (2011-2016). It also handles the sewer connection permit process. It is also responsible for operation of the Delta Household Hazardous Waste Collection Facility.

The Engineering department is also responsible for regulatory compliance and development, reviews and inspections, and management of the regional partnerships for the Bay Area Biosolids to Energy project and the Bay Area Recycled Water Coalition efforts which DDSD is the lead agency.

This department employs registered engineers, engineering technicians, and people with Computer Assisted Drawing and Design (CADD) and mapping technical training.

Current engineering department positions include District Engineer, Principal Engineer, Associate Engineer, Engineering Technician, Environmental Compliance Engineer, Construction Inspector and Household Hazardous Waste Technician.

Prepare for a Great Career Providing Essential Community Services and Protecting Our Environment

It Helps to... be comfortable using machines, tools, and computers.

Be able to work collaborative as part of a professional team, yet possess initiative and resourcefulness to work independently.

Understand workplace culture, etiquette, and practices.

Be computer literate with technical computer programs as well as office programs such as Microsoft Word, Excel, and PowerPoint.

Understand how to build, utilize, and maintain a professional network of relationships and the role a network plays in personal and professional success.

Want to deliver a high level of customer service.

Make High School Count. . .

- Do your best in math, chemistry, and biology
- Get experience working with computers
- Sign up for shop courses to learn how to use tools and machines
- Participate in career fairs and science camps
- Seek internship opportunities

Remember. . . The government establishes standards for clean water, and wastewater professionals have to professionally keep up with these regulations.

For more Information. . .

California Association of Sanitation Agencies: www.casaweb.org
California Water Environment Association: www.cwea.org
Water Environment Federation: www.wef.org
California Office of Operator Certification: www.swrcb.ca.gov/cwphome/opcert
Los Medanos College: http://www.lomedesanos.edu/departments/envsc/default.asp
Solano College: http://www.solano.edu/degrees

For available positions at Delta Diablo Sanitation District, visit “Employment” at www.ddsd.org.

Delta Diablo Sanitation District
2500 Pittsburg-Antioch Highway
Antioch, CA 94509
925-756-1900
www.ddsd.org
Wastewater Careers at Delta Diablo Sanitation District

Operations
Wastewater Treatment Plant
Operators work with equipment to remove potentially harmful industrial, agricultural, and domestic contaminants from wastewater before it is returned to the environment or recycled. Together with engineers, regulators, scientists, and technicians, Operators are responsible for meeting federal, state and local water quality standards.

The skilled work performed by Operators involves the operation, control, and maintenance of electric motors, valves, pumps, chemical feeding devices, and mixers. They use equipment to regulate the flow of untreated water into treatment plants and the flow of treated water out of these plants. They monitor flow rates, water level and distribution, and pressure levels.

Operators perform chemical or biological tests on water samples. They add specified amounts of chemicals to disinfect and clarify water.

They also operate and monitor process units treating the solids removed from wastewater as well as the foul air generated from treatment. Other duties include daily reading and logging of meters, gauges, and indicators. They prepare required reports based on gauge readings, test results, and water volume processed. Operators inspect equipment and perform routine maintenance. Increasingly, they use computers and automated equipment in their work.

Laboratory
The wastewater laboratory performs the EPA-required National Pollution Discharge Elimination System analyses. The laboratory performs analyses on the wastewater coming into the plant (influent) and the treated water coming out of the plant (effluent) at different stages in the treatment process. Analyses of the industrial discharges coming into the plant, and river and storm water samples. All testing is done so that the best and most effective treatment options can be selected and minimum environmental impact can be assured. The laboratory is certified by the California Department of Health. This means the lab must maintain a high level of quality control and produce accurate and reliable data.

Pollution Prevention
The District’s Pretreatment Program consists of two Industrial Monitoring Inspectors who routinely inspect, permit and monitor industries and commercial establishments. They sample the industries according to their permit requirements. Pretreatment staff also monitor sewer trunk lines for unusual discharges, conduct special investigations of prohibited discharges and work closely with representatives of area businesses to eliminate potential problem discharges to the sewer system or storm drains.

Maintenance
Our Maintenance Division is responsible for maintaining a 16.5 million gallon a day wastewater treatment facility, one of the largest industrial recycled water facilities in California, the Delta Household Hazardous Waste Collection Facility, and fleet maintenance. They are also responsible for street sweeping and wastewater collection system services for the Cities of Antioch, Pittsburg and the unincorporated community of Bay Point. The District serves an estimated population of nearly 200,000 residents in a service area of 52 square miles. The District’s wastewater collection and conveyance systems include five pump stations and 71 miles of sewer pipelines.

Collections Systems
Collection System crews are responsible for maintenance and repair of the sewer lines and manholes. They inspect and video tape all new sewer lines after they are constructed. Additionally, they locate sewer laterals for other utility work in the public right-of-way. A major component of maintenance and cleaning of the conveyance system which consists of 57 miles of gravity sewers and 14 miles of force mains.

Business Services/Administration
Wastewater treatment requires a variety of management and administrative support, including financial management, accounting, Board of Directors support, computer technology, human resources, community engagement records management, website maintenance, and administrative support.