baywork
bay area water/wastewater workforce reliability

ENGINEER PROFILE

Name: Amandeep Saini
Organization: Santa Clara Valley Water District

Engineering Discipline (Check one below):

- ☐ Civil
- ☐ Mechanical
- ☒ Electrical
- ☐ Environmental (including Process)
- ☐ Structural
- ☐ Information Technology
- ☐ SCADA
- ☐ Other

1. Please describe the work you do:

   I'm responsible for the design, development, implementation, modification, and installation of the District's electrical systems in the areas of water production, treatment, and distribution. I prepare design documents for electrical system upgrades, and review design prepared by consultants to ensure work quality and adherence to professional codes, standards, and District requirements.

2. What combination of education, experience, and skill was required in order for you to obtain your job?

   To obtain this job my education as a Bachelor in Electrical Engineering with emphasis of power systems was a key, and one of the minimum requirements is to have a Professional Engineering License in Electrical Engineering in the State of California.

   Some of the other skills that help me to obtain this job were: Working well independently and as part of a team, organizational experience with groups and projects, use of computer applications and programs to perform calculations and data analysis, detail oriented and able to provide concise and comprehensive analysis, hard working, reliable, and flexible to complete the job assignments.

3. What do you like best about your job?

   The best part of my job is to use my education and skills to complete the design of electrical system, oversee the construction, and finally observe it working to help either treat or deliver the drinking water to the customers.

4. Please tell us about the water or wastewater engineering project you enjoyed working on the most, and what made it rewarding,

It’s fulfilling to know that my work is providing reliable system to deliver safe drinking water to the community. The project that I enjoyed the most is Rinconada Water Treatment Plant Primary Electrical System Improvement Project in which we upgrade the major components of the electrical distribution system to make it more reliable and at the same time more flexible to maintain.

5. What qualities and capabilities are needed in order for an engineer to be successful in the water/wastewater industry?

   Some of the qualities and capabilities are; dedication toward public service, hard working, quick learner, detail oriented and able to provide concise and comprehensive analysis.

6. Do you have any advice for an individual who is considering pursuing a career as an engineer in the water/wastewater industry?

   Participate in the hands-on, experiential learning opportunities. This will help you understand the engineering concepts in depth and you will be able to produce a better design. This will also help you in getting the first job because you'll have something unique to show a prospective employer when you graduate, while other students may only be able to list their courses.