

MISSION-CRITICAL PROFILE

Name: Sonny West

Organization: San Francisco Public Utilities Commission –
Wastewater Enterprise



Job Category (Check one below):

- | | |
|--|--|
| <input type="checkbox"/> Water Treatment | <input checked="" type="checkbox"/> Electronic Maintenance Technician/ Instrument Technician |
| <input type="checkbox"/> Water Distribution | <input type="checkbox"/> Electrician/Electrical Line Worker |
| <input type="checkbox"/> Wastewater Treatment | <input type="checkbox"/> Machinist/Mechanic |
| <input type="checkbox"/> Wastewater Distribution | <input type="checkbox"/> Other |

1. Please describe the work you do:

Daily Tasks: Troubleshoot, repair, replace, install, fabricate, and configure equipment using build In program menus, documentation, failure analyzes, some logic programming, using the SCADA HMI system.

Equipment: All types of Instruments encountered in industrial environment focused on the Control and Measuring side, e.g. Flow meters, Valves, Pumps, Chemical Analyzers, Programmable Logic Controllers, Level Devices, and Wireless Data Radios.

2. What combination of education, vocational training, apprenticeship, experience, and/or skill did you obtain in order to be qualified and selected for your job?

Start: Workshops in High School, introduction to simple Electronic/Electrical

Formal: 2 years Trade/Vocational for SIEMENS Inc. – certificate in Electrical & Power, additional 1.5 years completed with Electronic Tech certificate, also SIEMENS Inc.

....2 year for A.S. Degree in Electronics with certificate

....2 years University of Berlin, focus on Electronics & Computer science, B.S.EE not completed

Work: several years of employment for mostly private companies in 2 different countries and 3 different cities in the U.S.A. Highlights were ‘Applied Research Labs’ - Test Engineer, ‘Karta Technologies’ – Engineering Tech ‘Litton Guidance’ now ‘Northrop’ (Defense Contractor) – Electronic Test Tech. Hughes Aircraft – Solar division, and the City & County of San Francisco – Electronic Instrumentation and Control Technician.

All Jobs were “Hands-On” required broad knowledge and skills, like Radio Frequency, Electronics/Electric, Mechanics, Chemistry, Fabrication and Prototypes, Computers and diverse software platforms.

3. What do you like best about your job?

Diverse job tasks, not repetitive, exposed to different technologies, working for a large well known City like San Francisco, interfacing with different crews/teams at the work place, get exposure and work on large expensive and complex equipment & systems that small companies do not have, good pay, get the freedom to

work independent and self-directed. I feel proud to help the environment to clean up the WasteWater and return it to the ocean without harming water and wildlife.

4. Please tell us about the projects and activities you have enjoyed most in your work in the water/wastewater field, and what made them rewarding,

Build & wired complete control systems (Cabinets/Control boxes) with PLC's.

Assigned to pump stations, work is independent, requires good planning due to remote locations, had own truck to access ~ 30 different locations in SF including Treasure Island. I really enjoy trouble-shooting and resolving problems on complex installations/systems.

5. What qualities and capabilities are needed in order for a person in your area of expertise to be successful in the water/wastewater industry?

You need a wide variety of background in general science, math & physics. It is also helpful to have very good hands-on skills, knowledge not just electronics, but also electrical, pneumatic, hydraulic, chemical, and mechanic. Being able to apply these skills in the day in/day out work in the field is important.

High active personality is a needed quality and helps the whole crew. Technical decision-making should be based on logic, reason, not emotional; especially when troubleshooting, failure analysis and design of improvements.

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

Present modern civilization and life is based on inventions of technical devices and machines and associated entrepreneurship over the last 200 years or so. The great thinkers like Einstein, Faraday, Edison, Steve Jobs etc. came all from a scientific background. It is absolutely needed to have a good Physics/Math/Engineering education to continue this trend. But that is not enough. The Education in those fields is only the foundation. Knowledge has no meaning if it is not applied and fosters creation. As a maintenance worker at The SFPUC, we have a chance to apply this every day to the best intent, on a small or large scale.

Wastewater has some bad notion in regard to dealing with waste and sewer. Most find that is not an issue, especially since only ~ 20 % comes from toilettes etc. The first step of modern humans is to take care of their waste and be conscious of the surrounding environment. Many countries in the world still do not have that as a minimum. It is a good field to work in.

The next step will be to turn Wastewater into drinking water, some cities are doing it, this will be an interesting challenge for the new hired generation. Do not fall into the notion/trap of thinking that city workers are lazy or don't do much. Jobs like this require hard and smart work, being active, forward thinking, honest, goal oriented and job completion.