

MISSION-CRITICAL PROFILE

Name: Charles V. Johnson

Organization: San Francisco Public Utilities Commission, South East Waste Treatment Facility

Job Category (Check one below):

- | | |
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| <input type="checkbox"/> Water Treatment | <input checked="" type="checkbox"/> <u>Electronic Maintenance Technician/ Instrument Technician</u> |
| <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 Collections | <input type="checkbox"/> Other |

1. Please describe the work you do:

Question #1. As a Journeyman Instrumentation and Controls Technician, responsibilities include

- Maintain, troubleshoot, and repair complex electronic instrumentation and related systems and equipment for a major waste water treatment facility
- Electronic equipment, components and systems installation and testing
- Electronic equipment , components, and systems calibrations
- Complex electronic instrumentation programming for functionality

These systems and all supporting instrumentation components control the dynamic functioning of waste water Flows, pressures, temperatures, levels, solids, turbidity levels, pH and oxygen content as well as many other by-products of treating waste water.

- Parts logistics, task management, (planning) and accurate records maintenance
- Communications and planning with project managers, project engineers, and facilities management.

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?

Question #2. While A member of the United States Navy, I attended Digital and Analog electronics maintenance schools equivalent to two years of JR College. I received all of my electronics systems maintenance, operations, testing, fault analysis, troubleshooting and repair while onboard nuclear powered submarine.

I also taught all facets of electronics at Heald colleges I received my A. S. Degree in Electronics Technology from Solano Community College in December, 1995

3. What do you like best about your job?

Question #3. I enjoy the task of troubleshooting and repair of systems that fail.

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,

Question #4. There are a lot of various systems at waste water facilities utilized to control and process sewage and drain water. There are also systems in place to treat the various gasses produced by waste water and it's by-products such as methane, and hydrogen sulfide.

I enjoy all aspects of the maintenance process, and project support. Most recently, a new multi-million dollar Oxygen Generation Plant (O2) project was completed, and entered into the testing phase. This is a very critical system capable of producing about 99% pure oxygen. I was entrusted with learning the ends and outs of how the new O2 plant functions, and the dynamics of air flows while transitioning from regular atmospheric air, to almost pure oxygen. This was very rewarding to me.

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?

Question #5. Be very motivated, willingness to push yourself to accomplish repair tasks, desire to always learn, very effective communications skills, high level of curiosity, and self-confidence, and good common sense to name just a few.

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

Question #6. Be very motivated all the time, and willing to learn new systems and tasks.