



## Water System Operation and Maintenance Training for Saipan, Commonwealth of the Northern Mariana Islands



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Due to budgetary constraints, the Saipan Commonwealth Utility Commission (CUC) operation and maintenance division has undergone relatively large changes in personnel over the last few years. Many of the technicians have left the agency and new personnel, currently working on the system, are relatively untrained. Presently, CUC is experiencing a serious operation and maintenance problems with the various components of water and waste water systems. This includes mechanical and electrical controls for pumps in the water supply and wastewater collection systems and the maintenance and repair of altitude and pressure regulating valves in the distribution system. The CUC has requested that we carry out a hands-on training program in pump and automatic regulating valve repair and maintenance for their operation and maintenance people in both the water supply and wastewater areas.

We are proposing to provide and one weeklong comprehensive training program in operation and maintenance of pumps and valves for utility personnel. The training will be made available to utility employees of the Commonwealth of the Northern Mariana Islands (CNMI) and will be carried out in Saipan.

The proposed training will consist of the following topics:

### **PUMP REPAIR AND MAINTENANCE**

1. Site inspection of water and wastewater facilities
2. Pump station equipment design, operation and maintenance
3. Hands on training at the CUC maintenance shop covering preventative and overhaul maintenance of existing pumps and controls
4. Discussion of future needs and required actions for long term preventative maintenance program

### **VALVE REPAIR AND MAINTENANCE**

1. Site inspection of existing altitude and pressure regulating valves (PRV)
  2. Theory of operation of Altitude and PRVs
  3. Hands on training at the CUC maintenance shop covering preventative and overhaul maintenance of valves
- Discussion of future needs and required actions for long term preventative maintenance program for automatic valves in utility systems