



WATER RESOURCES RESEARCH GRANT PROPOSAL

Project ID: 2002GU7B

Title: Water Quality Analysis and Water System Operation and Maintenance Training for Chuuk State FSM

Project Type: Education

Focus Categories: Education, Water Supply, Management and Planning

Keywords: Water Resources, Training, Education, Operations and Maintenance

Start Date: 03/01/2002

End Date: 02/28/2003

Federal Funds: \$21,723

Non-Federal Matching Funds: \$0

Congressional District:

Principal Investigators:

Leroy F. Heitz
University of Guam

Shahram Khosrowpanah
WERI, University of Guam

Abstract

The Chuuk State Public Utility Corporation (CPUC) is in the process of upgrading the Weno Public Water supply and wastewater collection Systems. The chance for having a twenty-four hour water supply might be achieved after completion of this upgrade, but the quality of water being produced is still questionable. In order to ensure that the system produce potable water, the Chuuk EPA and CPUC have requested training in water testing to better enable them to monitor the quality of this water. The CPUC operation and maintenance division has also undergone relatively large changes in personnel over the last few years and many of the technicians presently working on the system are relatively untrained. Presently CPUC is experiencing their most serious operation and maintenance problems with the mechanical and electrical controls for their pumps in the water supply and wastewater collection systems. CPUC has requested that we carry out a hands on training program in pump repair and maintenance for their operation and maintenance people in both the water supply and wastewater areas. The training will consist of the following topics:

WATER QUALITY TRAINING

1. Microbiological quality of system
2. Chemical and Physical Parameters affecting water quality
3. Identification of representative sampling points
4. Chlorination and other necessary treatments
5. Assessment of future training needs for operators and laboratory
6. Review of existing water quality standards for possible amendments.

PUMP REPAIR AND MAINTENANCE

1. Site inspection of water supply facilities
2. Pump station equipment design, operation and maintenance
3. Hands on training at the CPUC 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