Alameda County Water District
Alameda, California

I. Respondent: Milan Viau, Water Treatment and Distribution Supervisor

II. Treatment Plant Characteristics:

Conventional treatment with raw water ozonation
100,000 people served
19 employees

III. Innovation:

A. Description

- WTP2 users hydroelectric power generated on-site

- WTP2 uses two bromate control strategies:
  1. pH suppression
  2. Upstream Chloramination

  Together, superior bromate reduction is achieved.

B. Type of Innovations

New treatment process
Optimization of existing resources

C. Motivation for Innovations

The high cost of electricity to make ozone triggered the hydroelectric power
Regulations trigger the bromate reduction strategies

D. Barriers/Challenges

Operator knowledge of electricity
Bearing wear-and-tear

E. Benefits

ACWD has saved a great deal of money with the hydroelectric power.
Bromate control allows treatment under a variety of conditions while keeping bromates under 1 ppb.

F. Staff Training

Additional training was needed
Additional work also required to monitor the systems
It has added to the knowledge standards for the operators and technicians.

G. Lessons Learned

We did not need to install a C02 carriage water system for pH suppression; Vabor feed works just as well.
Choosing the correct type of turbine for hydroelectric generation is very important.

IV. Information Sharing:

	Yes	No
Willing to host on-site tour		**X**
Willing to visit another regional water/wastewater facility to provide presentation on innovation.		**X**
Willing for staff member from other utility to conduct a follow-up visit to learn more about innovations.	**X**	
Interested in on-line forum to discuss water/recycling/wastewater treatment issues.		**X**