

**Sunol Valley Water Treatment Plant
San Francisco Public Utilities Commission
Sunol, California**

I. Respondent: Steve Hanes, SCADA Administrator

II. Treatment Plant Characteristics:

Water Treatment - 160 MGD Conventional WTP
2.1 million people served
16 Treatment/Field Operators

III. Innovation:

A. Description

Sunol Valley Water Treatment Plant has gone through a sizable upgrade that included the installation of a treated water reservoir and a disinfection process change to chloramines. The installation of Micro-motion Coreolis metering is now not only used to monitor the flow of the product, but is also used to monitor the density of the ammonia and adjust the pump speed to deliver the appropriate chemical composition for effective chloramine production. The use of this metering is used at the Sunol Treatment Plant as well as at the Chloramination Facility located downstream - Both use the same technology.

B. Type of Innovations

Increased use of information technology
New treatment process

C. Motivation for Innovations

The addition of ammonia to the process was labor-intensive due to the volatility of the product that reduces its potency and effectiveness.

D. Barriers/Challenges

Problem identification and communication were the major obstacles to a solution. In-house Information System Engineering identified and implemented the solution.

E. Benefits

Less staff time is required in the analysis of stored chemicals to determine the dosage/ratio changes to maintain process chemistry.

F. Effect on Staff Training

Staff needed to be trained on the function of the new control scheme and the SCADA interface screens for initiation.
Staff still requires training on the manual processes of evaluating on-site chemicals and process control, but a level of automation allows them to focus on the broader balance of the operation.

G. Lessons Learned

Operations has the pulse of where issues reside within the operating plants. Opening communications with in-house resources enhances the process without incurring large project expenditures.

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