

Dublin San Ramon Services District

Dublin, California

I. Respondent: Levi Fuller, Wastewater Treatment Plant Operations Supervisor

II. Treatment Plant Characteristics:

Wastewater/water recycling
155,000 people served
112 employees

Dublin San Ramon Services District (DSRSD) provides drinking water to more than 67,000 people in Dublin since March 1961 and in the Dougherty Valley since May 2000.

DSRSD provides wastewater collection and treatment at the Regional Wastewater Treatment Facility for approximately 138,000 people in Dublin and southern San Ramon since March 1961 and in Pleasanton (by contract) since September 1965.

DSRSD has produced recycled water for landscape irrigation and construction since 1999. In 2006 DSRSD and the East Bay Municipal Utilities District (EBMUD) formed the San Ramon Valley Recycled Water Program (SRVRWP). By the end of 2012 the SRVRWP was serving customers at 334 locations. Customers include the cities of Dublin and San Ramon, Dublin Unified School District, San Ramon Valley Unified School District, Dublin Ranch Golf Club, and The Bridges Golf Club at Gale Ranch.

III. Innovation:

A. Description

1. Mixed Liquor Activation Sludge Wasting, as opposed to Return Activation Sludge Wasting.
2. Recycled water - Continuous Backwash Sand Filtration & Micro-Filtration (CBSF/MF) Ultraviolet Recycled Water Treatment Facility
3. Bay Area Chemical Consortium

4. Cross-functionality - Water/Wastewater System Operator-Combined Wastewater Collection/Water Distribution Operators classification.

B. Type of Innovations

New treatment processes:

- Modification--- Mixed Liquor Activated Sludge Wasting as opposed to Return Activated Sludge Wasting

Modification of workflow processes or classifications:

- Water/Wastewater System Operator-Combined Wastewater Collection/Water Distribution Operators classification.

Inter-agency agreements to increase efficiency:

- Bay Area Chemical Consortium (BACC) – Joint Chemical Bidding Consortium currently consisting of 46 water and wastewater agencies in 12 counties, and growing. Member agencies are realizing substantial cost savings by jointly bidding treatment process chemicals.
- DSRSD, Pleasanton, and Livermore - Joint Effluent Disposal Facility through the Livermore Amador Valley Water Management Agency (LAVWMA).
- Dublin San Ramon Services and East Bay Municipal Utility District Recycled Water Agency (DERWA) –Joint Recycled Water Treatment and Distribution Facilities for San Ramon Valley.

C. Motivation for Innovations

1. Need for a more stable Activated Sludge Process
2. Recycled water - Need to recycle wastewater
3. Bay Area Chemical Consortium - Desire to reduce chemical costs
4. Cross-functionality - Desire to increase efficiency by improvement of employee skills sets.

D. Barriers/Challenges

1. There were no barriers or challenges for the Activated Sludge Process.
2. Recycled water - The challenge was convincing the public of the need for the project
3. Bay Area Chemical Consortium - The challenges were to convince other agencies that group bidding would result in cost savings for all. Working out the logistics.
4. Cross-functionality - The barrier was getting the employee bargaining union to support the cross training concept and combine what were previously two separate job classifications.

E. Benefits

1. Stabilization of the Activated Sludge process, elimination of wide swings in the wasting rate and mixed liquor solids inventory
2. Recycled water - Efficient use of the water resource more potable water available potable only purposes
3. Bay Area Chemical Consortium - Significant reduction in chemical costs for DSRSD, as well as other participating agencies
4. Cross-functionality - More efficient use of the staffing resources

F. Effect on Staff Training

1. Recycled water - Need to train staff on how to operate Continuous Backwash Sand Filtration & Micro-Filtration (CBSF/MF) and UV facilities. Increase in the on-shift operational responsibilities. Increase in the Mechanical, Electrical, SCADA, and Instrumentation work responsibilities.
2. Bay Area Consortium - Insignificant training need; however, significant staff time needed for coordination and administration
3. Cross-Functionality - Training needs for staff

G. Lessons Learned

1. Recycled water - CBSF is not as robust at removing turbidity as pilot testing indicated. UV system presented some start up challenges.
2. Bay Area Chemical Consortium - Administrative challenges, sore bid losers challenging awards

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 a staff member from other utility to conduct a follow-up visit to your utility to learn more about your innovation.	X	
Interested in on-line forum to discuss water/recycling/wastewater treatment issues?	X	