

Los Angeles Chapter of the WateReuse Association
MEETING SUMMARY



Location: West Basin Municipal Water District
Address: 17140 S. Avalon Boulevard, Suite 210, Carson, CA 90746-1218
Purpose: Bi-Monthly Meeting
Date and Time: February 12, 2013 from 11:30 am-1:30 pm
Distribution: Los Angeles WateReuse Association Chapter Members

- 1) **Lunch** – Hosted by CH2M HILL
- 2) **Presentation by CH2M HILL** – Novel Application of the Membrane Technology for High End Reuse (Dr. Zeynep Erdal)

Don Zylstra, Sr. Project Engineer with West Basin MWD introduced Dr. Erdal and the project underway for the design of 12-mgd membrane bioreactor (MBR) facility at West Basin's Carson Regional Water Reclamation Facility to provide nitrified water for industrial users. MBR technology is typically used in a high solids conditions, a unique application is being tested for implementation at the Carson plant using tertiary MBR with low solids loading. Although tested in Hamilton, Canada, it has not been employed elsewhere full-scale.

Dr. Erdal described the pilot testing currently underway and provided preliminary results. Parameters being monitored include those related to the nitrification process as well as constituents that will ultimately affect downstream reverse osmosis system (RO).

Filtered, Title 22 feedwater to the Carson plant is provided from West Basin's Edward C. Little Water Reclamation Plant (ECLWRF), which treats secondary effluent from the City of Los Angeles' Hyperion Treatment Plant. Ammonia-N in the influent averages 53 mg/L and the target effluent quality is <1 mg/L ammonia-N, with turbidity <0.2 NTU. The Carson plant's existing nitrogen removal system is very susceptible to changes in influent water concentrations, at times requires breakpoint chlorination to reach the required ammonia levels.

A technology assessment was conducted where suspended as well as attached growth systems were considered. MBR was selected and pilot testing for proof of concept for nitrification. The pilot system being tested was provided by GE Zenon.

Initial results from about one month of recent operating data indicate ammonia-N levels in the pilot plant effluent are non-detectable. They also found that the system is robust, i.e., effluent quality was not affected by a significant drop in influent pH that it had experienced.

The piloting will continue to operate under steady state conditions, and will then be stressed with challenge tests. The data will inform the subsequent plant expansion design which can be scaled directly from the pilot level hydraulic retention and solids retention times.

Marc Serna, Engineering Manager with West Basin indicated that the next stage of work will include short-listing of membrane vendors to conduct side-by-side pilot testing to further optimize membrane systems to inform proposal for membrane pre-selection process.

Zeynep's presentation can be found on the LA Chapter WateReuse website.*



3) Legislative/Regulatory Updates (Raymond Jay)

Anyone interested in taking over the tracking and reporting of Legislative/Regulatory issues should contact Raymond or any of the other Board members.

Raymond briefed the chapter on the following key regulations related to recycled water use:

- *Water Recycling Act of 2013 (formerly AB 2398)* – Bicameral (2-stage) process is complete. Addressed contentious issues, e.g., level of spill reporting – State Board and CDPH have reached agreement; Title 17/22 issues such as hose bibs, how irrigation is conducted, raw water augmentation/potable reuse. – re: Adv. Treated Purified Water - Has gone to Legislative Council as much shorter bill – will get Bill no. soon. (in ~2 weeks).
- *Drinking Water Legislation (AB 145 & SB 177)* – re: CDPH capacity, access of rural disadvantaged communities to SRF funding. Moves CDPH Drinking Water Program to State Board (AB 145 also moves SRF to State Board). The reuse community is concerned about this move and prefers to have these issues addressed through CDPH, as the State Board is politically appointed. The State Board has a much larger staff to deal with grant funding. Some concerns include whether moving these responsibilities will address rural issues, how CDPH responsiveness can be encouraged by establishing deadlines. Perhaps shifting these responsibilities to CalEPA rather than to the State Board should also be considered. **Send suggestions/concerns to WaterReuse.**

Placeholders:

- *SB 36 (& others)* – re: *Water Bond (a.k.a. Safe Clean, Reliable Drinking Water Supply Act)* – Revisiting water bond to reduce cost and thereby increase likelihood of getting onto a ballot. Currently contains just brief descriptions as placeholders.
- *SB 37 – CEQA reforms* – Many don't believe that CEQA is working efficiently. Reforms would modify CEQA requirements so it is less effective as a stall tactic for project opponents.
- *AB 21 – Safe Drinking Water Small Community Grant* - Would allow small, disadvantaged communities to pay annual fees instead of interest. It would be easier for them to pay a set fee for the cost of services rather than a percentage of the borrowed amount.
- *SB 4 – Hydraulic Fracturing* – Target is to adopt regulations by 2015 that will require disclosure and reporting of fracking fluid content as well as disposal of the water that is extracted during the fracking process.

Proposed Legislation:

- *Potable Reuse Proposal* - A bill is being developed by the San Diego County Water Authority to expand potable reuse in San Diego by pressing CDPH to address Direct Potable Reuse (This was supposed to be done this year, but CDPH is saying that they do not have the resources to meet this target.)

Regulation Update:

- *Recycled Water Policy:* Amended in January, it incorporates recommendation of the science panel regarding monitoring for 3 primary CECs. A “13267 Letter” would be



required by local Regional Boards to request additional data from recycled water purveyors.

- *Groundwater Replenishment Reuse Regulation*: CDPH completed review of submitted comments and plans to release revised version of regulation in Spring 2013.

Raymond's presentation contains a diagram of the state rulemaking process and can be found on the LA Chapter WaterReuse website.*

4) Department of Public Health Update (Carlos Borja)

Carlos Borja with LA County Department of Public Health was not available this time. Juan Arriola with CDPH noted that CDPH met last week regarding AB 145/SB117 and indicated that the Department has no formal opinion on legislation.

5) Membership Roundtable – Projects, Regulatory Issues, Financing, etc.

West Basin MWD's Phase V expansion at ECLWRF: The 12.5-16.5 mgd design-build expansion by Parsons will expand delivery of recycled water to the West Coast Barrier system for 100% recycled water contribution (RWC) to replace the use of imported water. Construction is expected to be completed at the end of March. Ozone is being added at 6-12 mg/L as a pretreatment for the microfiltration process.

6) California State Section Update (Monica Gasca)

The annual CA Section WaterReuse Conference will be held March 17-19 in Monterey.

7) Chapter Updates

- a. December Chapter Meeting Notes – Approved as drafted; any corrections should be sent to Judi Miller.
- b. Chapter Newsletter Update – Matt Elsner indicated that they will try to get another issue out before the conference. The Spotlight column will be expanded to highlight firms as well as local agencies.
- c. Raymond suggested scheduling a gathering of LA Chapter members during the State Conference should meet as an opportunity to discuss issues of concerns.

8) Other Topics

- a. *Industrial Reuse Committee (IRC)* – Elise Goldman with West Basin MWD's Water Efficiency Department briefed the chapter on the committee's activities since its inception in 2011. There are 70 active members of the IRC that have identified 5 areas of interest: cooling, manufacturing, food processing, high-purity applications, and internal reuse. Research needs they have identified have spurred funding for a research project (WRF 12-03) designed to help business and utilities work together to facilitate industrial reuse. This project is expected to be completed this year. They have conducted workshops and webinars and have become involved in national legislation.

The IRC is also coordinating with industrial water use initiatives by other organizations, including the American Society of Mechanical Engineers (ASME) and



USEPA. A report stemming from a workshop by WEF and ASME on best practices and future directions for recycled water use by electric utilities can be found here:
<http://files.asme.org/Committees/K&C/TCOB/BRTD/WMT/33220.pdf>

The IRC will present a session at the April AWWA Sustainable Water Management Conference in Nashville, and an Industrial Reuse Specialty Conference will be held **December 9-10, 2013 in Long Beach.**

Elise's detailed notes can be found on the LA Chapter WaterReuse website.*

- b. *Firefighting with Recycled Water* - Earle Hartling indicated that he has received a write-up from Las Virgenes on their treatment process, and the City of LA is sending theirs. Still needs West Basin MWD's and Burbank's. He will then follow up with the two Regional Board in LA County (LA & Lahontan) to get approval from them to preemptively to use recycled water for firefighting.
- c. *Revision to LACRWAC Recycled Water Users Manual* - Earle has received comments and will finalize with the working group (Joe Walters, Kraig Erickson, John Robinson, Rosalba Santana).

* The presentations from this February, 2013 meeting can be found at:
<http://www.watereuse.org/sections/california/losangeles/meetings>

Meeting Attendees

Member	Organization
Anita Matlock	Rain Bird Corp.
Asif Shiek	Burbank Water and Power
Chris Demonbrun	Los Angeles/Bureau of Sanitation
Dave Jones	CH2M HILL
Don Zylstra	West Basin MWD
Donald Cresse	Los Angeles Dept. of Water and Power
Dusty Moiso	Rowland Water District
Earle Hartling	Sanitation Districts of Los Angeles County
Elise Goldman	West Basin MWD
Evelyn Cortez-Daviz	Los Angeles Dept. of Water and Power
Gerry Filteau	Separation Processes, Inc.
Jeff Berk	Black & Veatch
Joe Walters	West Basin Municipal Water District
Judi Miller	CH2M HILL
Julia Aranda	Kennedy Jenks
Juan Arriola	California Department of Public Health
Kira Alonzo	Metropolitan Water District of So. Calif.

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FEBRUARY 12, 2013 MEETING SUMMARY



Kirk Allen	Los Angeles County Dept. of Public Works
Kraig Erickson	RMC Water and Environment
Marc Serna	West Basin MWD
Margo Lateano	Los Angeles Dept. of Water and Power
Matt Bequette	Los Angeles/Bureau of Sanitation
Matt Elsner	Burbank Water and Power
Quang Ly	Los Angeles County Dept. of Public Health
Raymond Jay	Metropolitan Water District of So. Calif.
Rosalba Santana	Los Angeles Dept. of Water and Power
Seth Carr	Los Angeles/Bureau of Sanitation
Shadi Bader	Burbank Water and Power
Shieva Tat	Los Angeles/Bureau of Sanitation
Susan Everette	Los Angeles Dept. of Water and Power
Zeynep Erdal	CH2M HILL
TOTAL ATTENDEES: 31	