

JTAC Presentation
MWRD's North Secondary Aeration Optimization Initiative
February 23rd, 2012

In 2011, MWRD significantly reduced aeration energy consumption in the North Secondary Process by carrying out various optimization tasks. The tasks associated with the reduced energy consumption include:

- Reducing DO setpoints in the aeration tanks gradually and reducing in-service blower horsepower from 5,500 Hp to 4,000 Hp
- Implementing an improved aerobic solids retention time calculator to manage mixed liquor inventory utilization
- Initiation of an in-depth evaluation of the operation of the Centrate and RAS Reaeration Basins (CaRRB) to better understand the role of DO and pH in this sidestream process
- Conducting an in-depth evaluation of the effectiveness of an ammonia feed-forward and feed-back dynamic DO setpoint adjustment control strategy.

These optimization tasks and their impacts will be covered in this presentation by Perry Holland. Perry is an O&M Engineer for the Metro Wastewater Reclamation District (MWRD). At MWRD, he is responsible for representing the O&M Department on various design and construction projects and is also involved in process optimization initiatives, pilot projects as well many other small projects within the O&M Department. Perry has been at the District for a year and a half and prior to coming to the District, was an Engineer at MWH for 10 years where he was involved in the design and construction of various wastewater facilities.

The luncheon will be held in the meeting room of the REI Store, 1416 Platte Street, in downtown Denver. From I-25 heading north, take the 23rd Ave exit; veer to the right onto Water St, which turns into Platte St. REI is on the right just beyond the underpass. From I-25 heading south, take the 20th St exit, turn right onto 20th St for a very short distance and then merge to the left onto Central St; turn left on 15th St, and then turn right onto Platte St. REI is on the left. Alternatively, exit at 23rd Ave and turn left, following Water Street to REI as described above. Please park in the underground parking lot, which is accessed through the surface lot on the south side of the building. Note: REI Denver is also about a 10 min walk from the Union Station Light Rail stop.

Check-in is from 11:30 am to noon, after which time the presentation will begin. Registration fees are \$20 for AWWA or WEF members, \$25 for nonmembers, and \$15 for Students. Please pay at the door either by cash or check (make checks payable to "RMSAWWA").

Registration is required by the end of Tuesday, February 21st. To register:

- Email jtac@ch2m.com and include names, affiliation, and number of people for the reservation,
- Receive email confirmation from JTAC. If you do not receive email confirmation by Wednesday, February 22nd, call Sandy Orren at 720.286.5252 or Steve Polson 720.286.5376. Please do not call in lieu of email for registration.
- If needed, cancel by NOON on WEDNESDAY, February 22nd.
- Please respect the registration process! If you reserve and do not show up for the luncheon (or cancel in time) you must cover the cost of your lunch. If you do not pay for your registration, the cost must be covered by the committee. Send a check made out to "RMSAWWA" to:

Steve Polson
CH2M HILL

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