

The background image shows a large-scale construction project. In the foreground, a large yellow CAT excavator with the number 8049 is positioned on a pile of dirt. To its left, another excavator is working in a deep trench. A large concrete pipe is visible in the trench. The site is marked with orange and white traffic barrels. In the background, there are fields and a clear sky.

Capital Projects Update

May 16, 2024

Lisa Coleman, Director of Engineering

Madison Metropolitan Sewerage District

A decorative white wavy line graphic located at the bottom of the slide.

Today's updates

- Update on projects currently bidding
- Update on Liquid Processing Phase 2
- Quick Construction update
- “Coming attractions”

Bidding update – 4 projects

- West Interceptor Shorewood Relief – Phase 3

Award 5/30/24

- NEI-Waunakee Extension Capacity Improvements Ph 1

Award 6/27/24

- Electrical Service Equipment Replacement

Award 7/11/24

- Flow Splitter Improvements

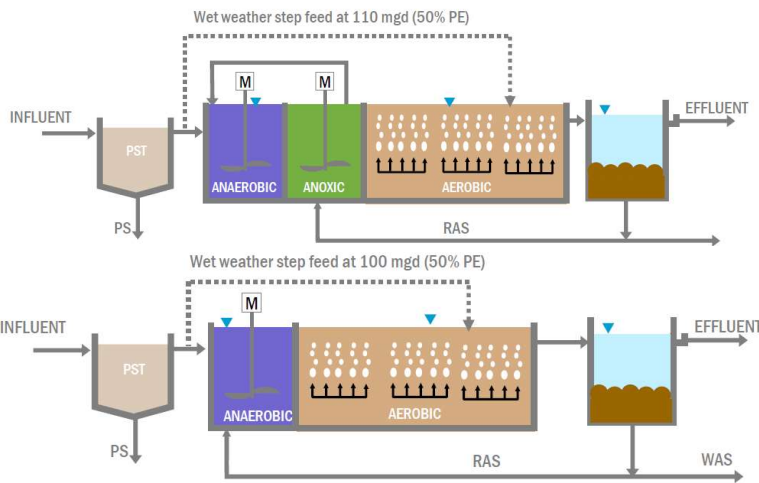
Award 7/11/24

Liquid Processing Phase 2

Update on BNR process choice

- Current process Modified UCT is a solid choice.
- Switching to A/O-low DO = increased capital cost. Similar net present value if low DO successful.
- Hybrid approach (still evaluating):
 - Anaerobic/Oxic (A/O) –if run at low DO
 - Modified UCT –if run at high DO
- Less increase in capital cost but may have lower net present value because of reduced energy.
- BUT- still need to look at primary clarifiers. Need (or not) for an additional primary clarifier has cost implications.
- Eliminate pilot plant step (save ~\$1M and ~1.5 yr+)

Madison Metropolitan Sewerage District



Liquid Processing Phase 2

Decisions

- Diffuser selection
 - Silicone Tube Diffusers
 - selected low energy configuration - more diffusers that each supply less oxygen
- Lowest net present value of options considered
- Potential Advantages:
 - less diffusers in general (12K vs. 45K)
 - new technology (but established)
 - lowest energy consumption of all options (even running at high DO)

Next steps

- Blower selection
- Preliminary design report 4th Q 2024

Madison Metropolitan Sewerage District





PS 17 FM Ph 2



PS 17 FM Ph 2



LBMC PH 5



PS 17 & PS 4

Coming Attractions



- Lots of bids to accept!
- Lower Badger Mill Creek Interceptor Phase 6 Relocation Order
- SEI Rehab on US 51 (Ph 1) bid in August



Questions?

Madison Metropolitan Sewerage District

