Asset Management Committee
Report to BACWA Board

Committee meeting on 2/26/2025
Executive Board Meeting Date: 3/21/2025
Committee Chairs: Rebecca Overacre (EBMUD) and Khae Bohan (Central San)

Committee Request for Board Action: None
22 attendees representing 11+ member agencies participated remotely.

Lubrication and the Different Levels of Success at the Central San Treatment Plant
Link to Presentation Slides

Brian Walters, Lead Maintenance Technician at Central San and CWEA's Mechanical Technician of the Year for 2024-2025, provided an overview of how Central San has employed best practices for lubrication to extend the useful life of 80 classes of assets such as pumps, blowers, fans, conveyor belts, and more. Key points from Brian's presentation included:

- A large fraction of machine failure (28% by Brian's estimate) can be attributed to particle contamination, which is a controllable factor. Precision lubrication practices can reduce maintenance costs, extend the useful life assets, and reduce safety hazards.
- At Central San, the agency's journey to improve lubrication practices included:
    - Setting up a centralized storage area and satellite storage areas that are designed to minimize particle contamination.
    - Getting staff certified through the International Council for Machinery Lubrication (ICML).
    - Obtaining better transport and fill containers that help minimize contamination and that are well-suited for the viscosity of different lubricants. These containers are offered by suppliers such as Des-Case and OilSafe ForFluids. Des-Case also offers training for ICML certification.
    - Ensuring that all new oil is filtered 7x and tested to ensure particle removal.
    - Adding desiccant breathers and quick-couple adapters to lubrication ports.
    - Using a mobile cart to filter and test oil at different sites around the plant.
    - Using an ultrasound device to monitor bearings, which can help the technician determine whether lubrication is needed based on the sound that equipment makes while operating. In Central San's case, this device allowed them to reduce the lubrication frequency for some equipment.
    - Setting up dedicated sampling ports and routinely monitoring plant equipment for particle contamination in the lubricant.
    - Using a database to track lubrication needs of different equipment, and linking to the source of that information.