Case Study
USAZWW-1067.002

Mixing In Two Effluent Storage Basins

Long-term cyanobacteria (blue-green algae) and odor control achieved.

Topics: cyanobacteria • blue-green algae • odor control • effluent storage basins • irrigation

Location & Contact Information:
Further information may be available upon request. Please contact Medora Corporation by phone at 866-437-8076 or by e-mail, info@medoraco.com

Basin Overview:

Two effluent storage basins of similar size and depth.

P1 Area: 3.6 acres
P2 Area: 3 acres
Max Depth: 8 feet

Each basin receives 1.2 MGD of effluent from the WWTP which then recharge water reclamation facilties at the local airport and golf courses .

Pre-Deployment Conditions: These basins are susceptible to algae blooms April through October and have severe weed growth in warmer months. Sludge build-up on bottom is also a concern.

Project Objectives: Control cyanobacteria blooms and improve dissolved oxygen levels throughout the pond water column to prevent odors issues. Enhance organic sludge digestion and improve overall water quality.

Solution: A total of two (2) SolarBee® SB10000V18 Lake & Reservoir Circulators, one (1) circulator in each basin. (2014)

Results: Since deployment, both basins have shown consistent cyanobacteria and odor control as well as improved overall water quality. The Customer is very pleased with the results and performance of the equipment over the years.

Update 2015: Per the Customer, "Things are going very well with the SolarBees. There are no problems what so ever and they are doing great!"

Update 2016: Per the Customer, "The SolarBee units are working very well. We have seen a vast reduction in the amount of algae that was inundating the ponds and plugging screens and pumps. No complaints, only positive results!"

Update 2019: Per the Customer, "We appreciate the courtesy service on the SolarBees. The units have served us well since they were put into service, with only minor maintenance required."