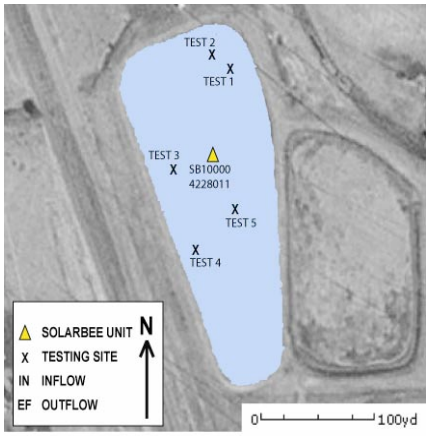
SolarBee®
Solar-Powered Reservoir Circulator
"Quality Water, Naturally"

Summarized Case Study: (WW)

Key Words: municipal wastewater, effluent storage, sludge reduction, water reuse, odor control, energy savings



Photos: First photo shows ice-free conditions around the SolarBee in the sludge storage pond; second photo is an aerial shot showing SolarBee placement and the test points in the pond.

Reservoir or Lake Use: This is an effluent storage pond that receives waste activated sludge from the municipal wastewater treatment plant. In the summer, some water is decanted off for irrigation reuse at a golf course.

System Overview and Reservoir: The sludge storage pond is 4.5 acres in area, with a maximum depth of 5 feet. When the SolarBee was installed, the clear water averaged 30 inches deep, the slurry averaged 3 inches deep, and the sludge averaged 27 inches deep.

Reported Problem Before SolarBee Installation: Two floating aspirators were used in the past, but they did not provide consistent odor control or sufficient sludge digestion. They also had $36,000 per year energy and maintenance costs.

SolarBee Installation: Date: August 2002, one (1) SolarBee SB10000 was installed with a 24-hour solar/electric kit. Clear water in the pond was about 39" deep, and the SolarBee intake was set to bring water in at depths between 24 inches and 36 inches.

Results: Since installation, the SolarBee has provided consistent odor control in all seasons, maintained consistent dissolved oxygen levels across the pond, and has significantly reduced the average slurry depth. Measurements made in December 2003 showed that dissolved oxygen was 20 mg/L in the top 2 ft of the pond, the average clear water depth was 40 inches, the average slurry depth was 11 inches, and the average sludge depth was 18 inches; so about 9 inches of sludge apparently was converted to slurry in 2003. The sludge island typically visible at low water is no longer there. The owner is very pleased with the benefits the SolarBee has provided.

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For information on SolarBee call 1-866-437-8076, or see *www.solarbee.com*