

Powered by Acti-Cell Technology® (ACT)

AERO™ & NUTREX™ Saves Federal Prison \$1,500.00 A Month! (Arizona) USA

ABSTRACT

The Federal Prison in Safford, Arizona USA, received complaints from nearby residents about odors from the prisons six wastewater lagoons, which were nearly filled to capacity. The prison could not afford to dredge the lagoons, purchase additional aerators or construct additional lagoons. The solids levels in the lagoons, however, needed to be reduced to meet local odor emissions ordinances.

BACKGROUND

This wastewater treatment plant had a flow rate of 1.6 million gallons a day. The system utilizes a primary treatment of screening and grit removal with a secondary treatment consisting of waster stabilization lagoons where suspended solids are subsequently allowed to settle and hopefully degrade.

PROCEDURE

Both Biofeed AERO™ and NUTREX™ were added at a continuous rate of 3 Parts Per Million (PPM) each using a metering injection pump.

RESULTS

After two weeks of applying Biofeed products the odor complaints ceased. After 8 weeks, the plant manager measured average reduction of 78% of the sludge in the lagoons. Dissolved oxygen (DO) levels increased from 2 mg/l to 10 mg/l and allowed for a reduction in run time of the aeration pumps resulting in electrical savings of \$1,500.00 per month. With continued usage, sludge levels were maintained at a minimum and the plant operated at maximum efficiency.

Innovation That GrowsSM