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AERO™ & NUTREX™ Eliminates Sludge & Odor in Arizona Canals (Glendale) USA

ABSTRACT

On June 12th 1995, treatment of the sludge filled irrigation canal system at Saguaro Ranch Park was initiated due to the presence of offensive odors. This canal is part of an extensive irrigation canal system which supplies water throughout the city. The results were significant as in some areas several feet of sludge build-up were eradicated in a very short period of time.

BACKGROUND

Flood irrigation is common in the southwestern U.S. as rainfall is not always sufficient to support turf grass or agriculture, and it is the least expensive method of delivering water to the farm and landscape. Sludge accumulation is normal as these canals are open to the environment and typically carry variety of waste materials that tend to settle in low-flow secondary canals. As organic matters accumulate, layering organic matter serves as an ideal environment for the proliferation of un-wanted anaerobic bacteria and the subsequent rancid odors they produce. Sludge depth was measured at 38 inches at the incoming culvert, and varied in depth from 14 to 38 inches throughout the canal. Complaints of bad odors were regularly made to the park superintendent.

PROCEDURE

Application of Biofeed AERO™ and NUTREX™ were made using a 50-gallon drip-feeder tank, which was installed at the incoming culvert that supplied water to nearly 2 miles of canal system. At the beginning of each irrigation cycle, the tank valve was turned on manually and a precise rate (3 PPM each) of the products was applied to the irrigation water as it flowed through.

RESULTS

Just 30 days after the treatment was started both Biofeed and City of Glendale personnel were present to refill the feeder tank and to inspect the canal. It was then estimated that over 97% of all the sludge had been eliminated and NO odors were detectable. A second treatment was made to complete the process and periodic treatments have been made to maintain the canal system in a clean and odor-free condition.