

Powered by Acti-Cell Technology® (ACT)

Results of Using Biofeed® Solutions Products in Dairy Lagoons (Twin Falls, Idaho) USA

ABSTRACT

A 60-day pilot test was started on February 28, 1998 at an 1,800 cow dairy farm. After 30 days of using Biofeed's AERO™ and NUTREX™, the odors emanating from the lagoons decreased significantly and the floating islands of crusted sludge were liquefied.

BACKGROUND

The growth of livestock populations and the concentration of livestock in feedlots has created high levels of odor and ground water pollution in rural areas with small human populations. Odors emanating from manure lagoons and nitrate and phosphate leaching into surface waters and groundwater has become a major problem in some agricultural areas. With growing pressure from the EPA and complaints from concerned citizens organizations, the owner of the dairy began to look for an economical solution for his problems.

PROCESS

Three (3) lagoons with capacities of 500,000 gallons, 3,325,000 gallons and 3,325,000 gallons were sprayed with AERO™ and NUTREX™ on a weekly basis. The first lagoon (500,000 gallons) gravity feeds into the second lagoon. The second and third lagoons were agitated using windmill type mixers and circulated using electric pumps. No changes or alterations were made to the maintenance of the ponds except for the weekly addition of Biofeed products.

RESULTS

During the first 30-days the following results were documented and have continued to improve:

- Significant reduction in odors emanating from the lagoons
- Liquefaction of sludge and elimination of floating islands of crusted sludge
- Reduction of approximately 6" per month of sludge volume
- Increased availability of nutrients in liquid sludge when applied to crops due to organic complexing
- Increased yield from crops where the liquified sludge has been applied due to enhancing soil microbial activity, stimulating biological humus formation and buffering of salts and toxic chemicals.

Innovation That GrowsSM