

Roebic Agriculture

Dairy Farm New Mexico, USA 2500 Head Dairy

Type of Wastewater System: Facility to Lagoon For Solid and Wastewater Collection

Problem: This facility has an expensive liner in its lagoon, and the use of equipment to remove the solids from the lagoon was not an option. It also dewateres the lagoon via irrigation onto row crops every 30 days. The buildup of solids in the lagoon had reached a point of capacity such that they were unable to maintain free board of water above governmental regulations. Also frequent complaints from neighbors and county officials regarding the odor were being received.

Expectations: To use microbial products to liquefy the lagoon as to be within governmental regulations of free board and reduce odor for relief of complaints.

Product Used: ROETECH 106 A

Date Started: 4/01/05

Starting Point Facilities: Lagoon at Capacity - 5,000,000 gallons (4,000,000 sludge 1,000,000 liquid)
Daily Influent-112,000 gallons

Date Analyzed: 10/01/05

Quantity Used: 300 lbs total of Roetech 106 A distributed Day 1 thru Day 30
2.5 lbs of Roetech 106 A per week thereafter
Total retail cost of \$3,288.15

Results: Free Board restored to regulation capacity
Lagoon- 5,000,000 gallons (500,000 sludge 4,500,000 liquid)
80-90 % Odor Reduction
No noticeable Odor when irrigating

Observations: Beginning at day 15 after starting treatment, breakup of bottom solids was observed. After 1st pumping of lagoon at day 45, the ridges and mounds of solids usually seen after pumping had decreased significantly. Manure that normally was stuck to sides had submerged.

Summary: This facility was at the threshold of waste capacity and in jeopardy of being out of compliance with State wastewater regulations. It also had received complaints from government officials and local residents for odor. Roetech 106 A liquefied the lagoon almost entirely, and brought their facility back well into compliance with their water permit. It also eliminated the source of odor within the facility enabling them to dewater without odor being emitted.

CASE HISTORY

