

Roebic Agriculture

Dairy Farm Oklahoma, USA

3000 Head Dairy

Type of Wastewater System: Facility to Sediment Basin for Solids collection
Sediment Basin to Lagoon for Water collection

Expectations: This facility was in need of solid removal from sediment basin as it was to a point of water flow restriction and solid capacity in the sediment basin. The expectation was to liquefy the solids in the sediment basins using microbial augmentation, and to not use costly equipment to do so. Further expectation was to increase wastewater flow to the lagoon for irrigation purposes.

Product Used: ROETECH 106 A

Date Started: 2/01/05

Starting Point Facilities: Sediment Basins at Capacity- 1,125,000 lbs manure in solid form
Lagoon at Capacity- 5,000,000 gallons water with 1/6 solids
Daily Influent-82,000 gallons

Date Analyzed: 8/10/05

Quatity Used: 200 lbs total of Roetech 106 A disributed Day 1 thru Day 30
1.75 lbs of Roetech 106 A per week thereafter
Total retail cost of \$2,045.60

Results: Sediment Basins- 50 % of solids liquefied, and wastewater flow restored
Lagoon- Free flowing and all but 1-2 inches of solids liquefied

Observations: At day 65 the crust on the sediment basins broke loose and water flow began to the lagoon. Noticeable odor reduction at the lagoon began to be observed at the same time.

Summary: At the time that ROETECH 106 A was introduced, this facility was in need of removing the solids from the sediment basins as they were at capacity and the facility was dumping solids into the lagoon which was not designed for solid collection. If mechanical equipment was to be used it would be at a cost of over \$25,000 dollars. The objective by using the Roetech product was to liquefy the sediment basins and to restore waste flow back to their system at a cost well below that of mechanical equipment removal. Roetech 106 A did so and kept up with their influent at the same time. Waste flow was resumed to facility specifications, the sediment basins were liquified to a point that no mechanical removal was needed and significant odor reduction was achieved. The facilities manager was well pleased with the results and the cost of using Roetech product. He is continuing its use Roetech and anticipating complete liquification of the sediment basins and further odor reduction.

CASE HISTORY

