



Animal Waste Focus Case Study Cattle

- COMPANY:** Luckey Custom Feedlot
- BUSINESS:** Cattle Feedlot
- LOCATION:** Devine, Texas
- OPERATION:** Luckey Custom Feedlot, Inc. is a cattle feeder with capacity for more than 15,000 head. The layout includes two ponds for manure laden run-off from holding pens. The smaller primary pond also collects waste water from an on-site slaughter house, and manure from a stock truck wash ramp. The primary pond's original capacity is 1,414,600 gallons. It overflows into the second larger pond, from which surrounding hay fields are irrigated.
- PROBLEM:** 1) Both ponds emitted strong noxious odors 2) The smaller pond was almost completely full of manure and sludge. It had 3 inches of water covering most of it. Bars of accumulated manure extended out into the water at inflow points.
- TREATMENT:** The Barnaby Company dispensed a mixture of Micro-Bac and Mega-Bac X bacterial products in the smaller pond. After this initial shock dose, a monthly maintenance program was established. Treatment continues.
- RESULTS:** 1) Foul odors went away in less than two weeks. 2) At 48 days into the treatment there was a visible reduction in solids in the pond and exposed manure bars disappeared altogether in 4.5 months. 3) Sludge build-up was reduced by more than a foot during the same period. 4) Savings in treatment of the ponds was \$7-8K, or about 50% of the cost of excavating a new pond.
- CONCLUSIONS:** Micro-Bac and Mega-Bac X bacterial products proved effective in eliminating odors and reducing built-up organic solids in this application.