



Dairy Waste Lagoon Case Study: Pumping Time Cut 52.5%

Animal Waste Treat (AWT) is a professional-grade microbial blend formulated for the treatment of livestock and dairy waste in lagoons, pits, and manure handling systems. It contains high-CFU animal waste treatment bacteria that target manure, urine, and other organic residues, helping operators maintain cleaner, more efficient systems. The specialized strains degrade fats, proteins, and fibrous material, reducing odors, sludge buildup, and nutrient overload that often lead to costly management challenges.

- **Controls Odors:** Targets hydrogen sulfide, ammonia, and volatile fatty acids to reduce nuisance odors
- **Reduces Sludge & Crust Formation:** Speeds digestion of solids and fibrous material
- **Improves Nutrient Balance:** Stabilizes nitrogen, phosphorus, and organic matter
- **Enhances Liquid Flow & Pumping:** Maintains hydraulic capacity and prevents clogging in waste systems
- **Supports Regulatory Compliance:** Reduces risk of discharge, odor violations, and nutrient overload
- **Lowers Operating Costs:** Decreases hauling, chemical inputs, and long-term maintenance

Problem: Meadow Rock Dairy Farm needed to improve conditions in a 67,500 yd³ waste lagoon with high solids buildup and severe odor problems. The lagoon had developed a 3 to 4 ft manure mat and crust on the surface, which made pumping difficult and time-consuming. The goal was to reduce solids accumulation, improve open water, and shorten pumping time for irrigation.



Before: the lagoon had a 3 to 4 ft thick manure mat and crust on the surface with an ever-present putrid odor. Pumping water from the lagoon for irrigation required 80 hours. The heavy surface buildup and poor lagoon condition created a major operational problem for the farm.

During (30 days): AWT was applied weekly to the lagoon. The lagoon reached 60-70% open water, odor was reduced, and pumping time dropped to 55 hours. These early results show that the lagoon was improving well before the full 45-day endpoint.

After: the lagoon reached 95% open water after 45 days of treatment, odor was eliminated and pumping time fell to 38 hours for irrigation use. Scum layer, bottom sludge and TSS all substantially improved as lagoon condition improved, and pumping time was cut by 42 hours, or 52.5% within 45 days.