



Hog Farm Improves Work Conditions & Wastewater Treatment with MICROBE-LIFT® /HOG

Location: Swine Farm, Southeast Georgia

Background: This twenty-year old farm consisted of several barns each of which was equipped with two 242-gallon rinse tanks that were used to flush the pit area under the barns twice daily. The manure pits discharged to a 5.5 million gallon lagoon. The lagoon was not meeting the discharge permit levels. Examination determined that there was no presence of biological activity in the lagoon and the solids build-up on the lagoon surface was at a critical level. H₂S odor was so severe that plant employees were often unable to perform their duties because of respiratory problems and eye irritation.

Objective: A three-pronged MICROBE-LIFT®/HOG treatment program was prescribed.

Results Achieved: The waste lagoon was treated with a single application of 45 ppm (250 gallons) of MICROBE-LIFT®/HOG resulting in immediate reduction of offensive odor emanating from the lagoon. Within 14 days, the lagoon showed signs of increased biological activity along with a substantial reduction in surface solids. Twenty-one days after treatment, the lagoon was extremely active with biological activity. The water and surface solids were virtually eliminated.

The barns were also treated by addition of MICROBE-LIFT®/HOG. The product was added to the 242-gallon rinse tank in each barn at a rate one quart per tank. Each barn contained 2 tanks that were used to flush the pit area under the barns twice daily. The hydrogen sulfide reduction was immediate. Covers were removed from the junction boxes and no offensive odors were detectable.

MICROBE-LIFT®/HOG was also used in the cleaning process of the farrowing barn. The product was applied with the use of a chemical input line on a pressure washer at a rate of 6 ounces per gallon. The entire interior of the barn was washed with the product. The results were outstanding. The only odor apparent in the farrowing barn following the treatment came from the feed in the barn.

The treatment program continued for a test period of two months. The plant employees reported remarkable reductions in the side effects of hydrogen sulfide as levels were substantially reduced.

MICROBE-LIFT®/HOG treatment was considered a success. It solved the TSS and BOD problems in the waste lagoon after a single treatment. The lagoon was functioning effectively just 21 days following treatment. Hydrogen sulfide odors, and associated toxicity, were greatly reduced by using MICROBE-LIFT®/HOG in the pit rinse system and cleaning systems in the barns.



For more information on MICROBE-LIFT® Technology contact
Ecological Laboratories Inc.
www.EcologicalLabs.com
CS11107