## Grease and Odors are Eliminated and the Treatment System is Restored at a Dairy In Panama

Location:

## Refrescos Nacionales S.A. , Panama City, Panama

**Background:** The grease traps and lagoon treatment system at this dairy beverage plant was severely overloaded with the high-organic dairy waste. Grease and other solids covered the surface of the lagoon and odors were intolerable, saturating clothing, and eliciting numerous complaints from surrounding neighborhoods. Biological treatment was poor as confirmed by microscopic exam that showed a high population of worms and solids that would not be present in an active biomass.



Fig. 1: Shows the lagoon covered with surface scum.

**Objective:** The facility wanted to eliminate the grease and surface scum that interfere with flow and aeration and improve waste treatment. They also wanted to eliminate the malodors that plagued workers and neighbors alike.

When contacted, Ecological Labs designed a treatment based on MICROBE-LIFT<sup>®</sup>/IND. This technology contains a highly active consortium of bacteria that rapidly eliminates grease and solids and restores energetic microbial action to lagoons. The program called for an initial dose of 4 gallons with two-gallon monthly maintenance doses.

**Results Achieved:** Within three weeks of the initial application, the oils and grease completely dissolved and the water changed color. Turtles that had not been present for years began to reappear.



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Fig. 2: At three weeks, the surface scum was eliminated.

The MICROBE-LIFT<sup>®</sup> technical representative recommended modification of the system by reattachment of some unused grease traps that had previously been disconnected and to dig one additional trap.

After twelve weeks, the system was free of solids and odors. The traps were odor-free and the lagoon had no detectable presence of solids.



**Fig. 3:** Before and after pictures show the complete elimination of surface solids.

After treatment, no further odor complaints were received. The condition of the lagoon continued to improve. Less incidence of flies and gnats were noted.

For more information on MICROBE-LIFT® Technology contact Ecological Laboratories Inc.

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