



DAIRY FIELD REPORT City in Australia

Project Summary

John Purcell (Western Victoria, Australia) recognized that there was probably “a bit much strain” on his dairy farm’s effluent pond.

Designed to handle the outflow from a 150 cow herd, John had increased his stock over the last 3 years by 100% to over 300 head.

Situation

A thick hard crust had formed on the pond and the wastewater had little retention time, short circuiting through the pond. The high sludge volume means reduced water volume, and less settling time.

This is often the case with systems that are overloaded due to increased herd size. In addition, the pond was displaying almost no bacterial activity.

Retention time is a key requirement for effective biological treatment as it allows the water to slow down, drop the bio-solids into the pond, and allow the bacteria in the pond time to digest the bio-solids. When fully digested, biosolids break down into water, carbon dioxide and humus.

Solution

A program of BIO ENERGIZER® application was planned to clean up the sludge already in the pond and then secondly, to prevent further buildup regardless of the number of cows John was milking.

The initial product requirement was 11.2 liters, with a further 350 ml dose per day for approximately 17 weeks. Application of the product is by an automatic pump that dispenses the product onto the concrete washdown pad just before the usual afternoon washup. This ensures the product is thoroughly mixed as it flows into the pond.

After 10 weeks the pond is almost at full efficiency and easily handling the daily volume and solids loading in the influent.

The crust completely disappeared within 10 weeks, and the number of bubbles rising to the surface showed significantly increased biological activity. In addition the increased retention time means a vastly improved digestion process is occurring.

John is pleased that he will no longer have to mechanically excavate the solids and that the quality of water he is using for irrigation has significantly improved.



Photo Taken Before the Application of BIO ENERGIZER®



Photo Taken 4 Months Later After the Addition of BIO ENERGIZER®

Product Info

BIO ENERGIZER® is a broad-spectrum bio-activator containing over 30 essential microbial growth-promoting ingredients. By design, BIO ENERGIZER® is a balanced formulation of vitamins, trace nutrients, enzymes, organic acids, and bio-stimulants that motivate the existing microbial community to greater metabolic capacity and efficiency. BIO ENERGIZER® is not a bacterium nor an inoculum.

For many years wastewater operators have continued to use BIO ENERGIZER® to cut their sludge hauling costs.

Operators Using BIO ENERGIZER® Report:

- 1) Increases in BOD removal efficiency.** BIO ENERGIZER® improves treatment plant removal efficiency to increase plant treatment capacity and more easily meet effluent requirements.
- 2) The elimination of expensive dredging costs.** BIO ENERGIZER® converts sludge into gases and water, reducing sludge accumulations. No draining, drying, excavating, or inconvenient down time.
- 3) The reduction of odors and aeration costs.** BIO ENERGIZER® enhances aerobic and facultative biological eco-systems to reduce the production of objectionable and offensive odors and enhances dissolved oxygen levels. BIO ENERGIZER® also increases the dissolved oxygen levels which decreases the need for aeration.

BIO ENERGIZER® enhances endogenous respiration for faster and more complete oxidation of sludge into carbon dioxide and water.

Our PROBIOTIC SOLUTIONS® Products
Are Highly Efficient and Effective Due to Our Unique Delivery System



Call Toll Free Today for Your Free Pond Evaluation and Sludge Removal Quote

1 (800) 961-1220