

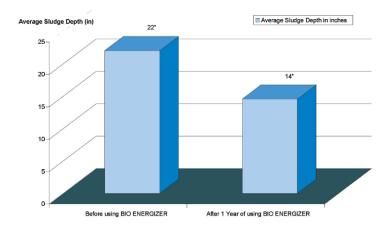
### BIO ENERGIZER<sup>®</sup> Saves City Thousands in Sludge Handling Costs FIELD STUDY

Location: Municipal Treatment Facility in CA

#### **Project Summary**

When the operators at a city in California would row their boat across pond #3, their oars would stir up accumulated sludge close to the surface. It appeared that sludge solids were escaping the pond and into the BOD test bottle causing high BOD results. Furthermore, the nutrients in the accumulated sludge were thought to be feeding algae and causing algae blooms in the pond. The superintendent elected to oxidize the sludge in place while keeping the lagoon online by using BIO ENERGIZER<sup>®</sup> from Probiotic Solutions<sup>®</sup>. BIO ENERGIZER<sup>®</sup> is a biochemical compound that accelerates the process of sludge oxidation.

#### Average Sludge Depth in inches for the City's Wastewater Pond #3. Before and After Using BIO ENERGIZER®



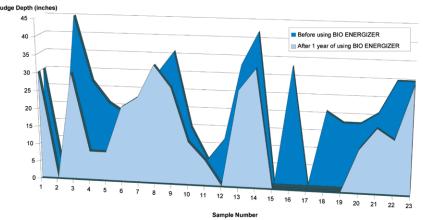
#### **Solution**

After one year's usage, about 50% of pond # 3's sludge was removed using BIO ENERGIZER® to transform the sludge into harmless CO2 and water. Using BIO ENERGIZER® has saved the City thousands of dollars in mechanical dredging, hauling, and disposal costs. Lagoon de-sludging using BIO ENERGIZER® is typically one-fifth to one-tenth of the cost of mechanical dredging and land applying or land filling sludge.

BIO ENERGIZER® is a broad-spectrum bio-activator containing over 29 essential microbial growth-promoting factors. By design, BIO ENERGIZER® is a balanced formulation of vitamins, trace nutrients, enzymes, organic acids, and biostimulants that motivate the existing microbial community to greater metabolic capacity and efficiency. BIO ENERGIZER® is a not bacterium.

For over fifteen years, wastewater operator at this municipal treatment facility have continued to use BIO ENERGIZER<sup>®</sup> to cut sludge hauling costs.

Sludge Blanket Profile Before and After the Addition of BIO ENERGIZER<sup>®</sup> to the Crestview Wastewater Treatment Lagoon





# **Probiotic Solutions® Product Information**

BIO ENERGIZER<sup>®</sup> is a broad-spectrum bio-activator containing over 30 essential microbial growth-promoting ingredients. By design, BIO ENERGIZER<sup>®</sup> is a balanced formulation of vitamins, trace nutrients, enzymes, organic acids, and biostimulants that motivate the existing microbial community to greater metabolic capacity and efficiency. BIO ENERGIZER<sup>®</sup> 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<sup>®</sup> 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<sup>®</sup> 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<sup>®</sup> enhances aerobic and facultative biological eco-systems to reduce the production of objectionable and offensive odors. BIO ENERGIZER<sup>®</sup> 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 Quote and System Evaluation. 1 (800) 961-1220

