Results of Using BIO ENERGIZER® to Save a Septic Treatment System

Residential Septic System in Massachusetts

Profile
A residential septic system in Massachusetts consisted primarily of one 1,500 gallon septic tank. Effluent from the tank flows into a 1,600 sq. ft. grass leach field through a distribution box that flows out to two 4 inch leach pipes. These pipes allow for percolation into the ground or loss through evaporation. The pipes are at depths of 3.5 feet to 4 feet at the furthest end of the leach field, covered with top soil and seeded with grass.

Project Summary
A residential home sits on 7/8th of an acre in Massachusetts. The home is located in the lowest point of the cul-de-sac, surrounded by wetlands, and backed by woods. The owner noticed, that after a particularly heavy rain, there was standing water in his yard over the septic tank and leach field. When the distribution box was uncovered there was 2 feet of standing water. The owner opened the septic tank and found it full of thick sludge and standing water as well. Upon further inspection the distribution pipes were found to be filled with a thick black sludge that completely blocked leaching from the pipes. The septic system was in critical failure. Although it had not backed up in the home, without immediate action, the situation would only get worse.

Problem
From observations, it was believed the natural bacterial environment within the system was being disrupted by the influx of toxic substances like bleach, soaps and household cleaners. Without proper bacterial decomposition, solids buildup occurred resulting in the critical failure of the septic system and the leach field.

Treatment Options
The concerned owner investigated multiple options with septic service providers in their area. The estimated cost for replacing the septic system was $26,000, and two other homeowners in the cul-de-sac had recently replaced their septic systems at a similar cost. This cost would have been a heavy financial burden for the owner. It was decided to clear out the system by pumping and try another long term approach. A representative of Probiotic Solutions® contacted the owner and after the owner’s questions were answered, he decided to try BIO ENERGIZER® in his treatment system in order to improve solids destruction in his septic tank and open up his leach field. It was decided that the owner would monitor the system at 30 day increments for 90 days to evaluate the success of BIO ENERGIZER®.

Treatment Solution
The first application began July 7th with addition of ½ cup to the septic tank and ½ cup to the distribution box. The recommendation for the next 30 days was ¼ cup every other day, applied by flushing it down one of the toilets. After 30 days the septic tank was opened and it was found that a sludge layer had not developed despite heavy loading to the system. There was also no standing water in the distribution box and a very little to no scum layer at the top of the septic tank. The dosage was reduced to ¼ cup twice a week in the toilet after 30 days. The septic tank was opened again at 90 days and the system was still in good working order.
**Conclusion**

With continual BIO ENERGIZER® use, a sludge layer never re-accumulated, the leach field performance was maintained and the scum layer was reduced dramatically. The owner was pleased with the recovery of his septic system and has decided to continue using BIO ENERGIZER® in his system.

**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.