

BIO ENERGIZER® Improves a Septic Treatment System in Oregon

FIELD REPORT

Location: Mobile Home Park in Oregon

Profile

The selected septic system consisted primarily of 2 tanks, a 3,000 gallon tank that receives the initial sewage input and a second 1,500 gallon tank that receives effluent from the first. Effluent from the second tank flows into a 4,200 sq. ft. grass leach field through a 6 ft. long pipe which connects to a perpendicular header pipe. The header pipe runs the full width of the leach field and, in a grid-like pattern, disperses the effluent through 4 branching pipes which allow for percolation into the ground or evaporation. The pipes are underground about 3 ft. with rock placed immediately above and below them, covered with top soil and seeded with grass.

Project Summary

The mobile home park sits on 10 1/2 acres in Oregon. Both the park's owner and site manager noticed a build-up of sludge in the leach field of one of the park's five septic systems. The sludge accumulation would not allow the water to drain properly. According to the owner, "You could dig two feet into the ground and find standing water." Although this slow percolation had not caused a backup into the homes, without immediate action, the situation would only get worse. The owner believed his problem stemmed from incomplete pumping of the solids in the past from the septic tank. However within a few days after pumping, the problem returned.

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 drainage problems within the leach field.

Treatment Options

Several products had been used previously without achieving the desired results. When water backed up 8 to 12-inches in an inspection hole above one of the pipes, the owner became very concerned. Investigating other options with environmental experts and contractors, the owner considered replacing the leach field

with a recirculating sand and gravel filter system. Total remediation, which included cleaning out the leach field pipes, was going to cost \$10,000 and the owner wasn't sure that would truly solve the problem. He said, "[N]o one really knew what the problem was. They wanted me to invest my money in an experimental situation and I was not anxious to do that." Having read some literature about Probiotic Solutions® the owner decided to call. After his questions were answered, he decided to give Probiotic Solutions® a try.

Treatment Solution

The first application of BIO ENERGIZER® was completed in February at the rate of 1 pt./wk. The points of application were directly into each tank and 1 pt./wk. directly into the effluent line going to the leach field. No major changes were noted for a couple of months except a slight reduction in the leach field water level. It was then decided to inject BIO ENERGIZER® directly into the leach field. Root feeders were used to put a grid of holes across the top of the entire field. The feeders were then used to inject BIO ENERGIZER® into the holes to a depth of two feet below the surface. At the beginning of treatment the water level was about 6-inches above the drain pipes within the leach field. Shortly after BIO ENERGIZER® was injected into the field, the water level dropped to approximately 2-inches above the leach field pipes.

Conclusion

With continual BIO ENERGIZER® use, sludge buildup on the bottom of the two tanks was minimized, the scum layer on the surface of the water inside the tanks was reduced to only 1 to 2-inches, compared to 6-inches before BIO ENERGIZER®. In addition, the odors emanating from the tanks and leach field have been dramatically reduced. The owner also discovered that the usual buildup of grease, phosphate precipitates and

other deposits within the pipes has been eliminated and believes the pipes may never need an expensive cleaning or septic pumping again.

"It's clear the probiotics are working," the owner said. "Since our waste input is about the same each day, we know we are keeping up on it."



Probiotic Solutions® Product Information

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 biostimulants 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. 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 Quote and System Evaluation.

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