Additives and Your On-site Sewage Management System

Background

With hundreds of products currently on the market, and some environmental engineering companies promoting their use, many homeowners have questions about septic tank additives. The Georgia Department of Public Health’s On-site Sewage Management Systems program is dedicated to educating the public and wastewater practitioners about on-site wastewater issues – and our position is clear: Additives are not beneficial to on-site sewage management systems and, in fact, can be detrimental!

So – What Is An Additive?

You might have heard them referred to as; septic tank treatments, cleaner, restorers, rejuvenators, or enhancers. They are all “additives” and they fall into two categories.

- **Chemical** additives are marketed to unclog drains and break up oil and grease. They may contain acids, solvents, hydrogen peroxide, or strong caustic agents. Some types of chemical additives are prohibited in Georgia.
- **Biological** additives are made from bacteria, yeast, or enzymes. They are marketed as starter agents or as aids in routine maintenance.

FAQ – Frequently Asked Questions

Q. – Is it true that some additives are necessary to give bacteria a “head start” when the system is new or recently pumped?

A. ~ Absolutely not! By design, an on-site sewage management system (commonly referred to as a septic system) does not need any help doing its job. The natural, biological process by which the system works requires only the bacteria that it receives from wastewater.

Q. – Is it true that “natural” additives, like those containing enzymes; bacteria, or yeast, can reduce or eliminate the need to pump the tank?

A. ~ Positively not! Some manufacturers claim that biological additives enhance treatment within the tank or can eliminate pumping by liquefying solids and grease. In fact, the additives can cause solids to break down into smaller particles that remain in suspension in the liquid within the tank. That combination of liquid containing small solids can flow into the drain-field and may lead to clogging. A clogged drain-field can be a nuisance and very expensive to correct.
Q. – How can a product that says it will keep my septic tank unclogged be harmful?

A. ~ Acids and other chemical solvents can upset or destroy the basic physical and biological functions of the septic tank: to separate the solids from the liquid, trap the solids, and cause those solids to break down. Chemical types of additives can cause solids to break into smaller pieces that stay suspended in the liquid within the tank. When those solids move out of the tank and into the drain-field, they can lead to clogging. In addition, the acids in some additives can actually corrode concrete septic tanks and distribution boxes, causing them to leak, become weak and fall apart. A whole new septic system can cost eight and twenty thousand dollars to replace.

Q. – But I’ve used additives before; there seem to be initial improvements with my system.

A. ~ What seem like initial improvements are short-lived gains with a big trade-off! If you don’t address the underlying problem, it will return and the repair could be a lot more costly the longer you wait.

So save your money! Additives can cost hundreds of dollars; but they will never eliminate the need for regular septic system inspection and pumping, which will do far more toward extending the life of your system and preventing unnecessary repairs or replacement.

Reference

The University of Rhode Island, College of the Environment and Life Sciences Cooperative Extension, NE Onsite Wastewater Training Center and Nonpoint Education for Municipal Officials.