



**AEROBIC BACTERIA:**  
The Key To Properly Maintaining  
Your Septic System

A BALANCED SEPTIC ECOSYSTEM



**aero-stream**<sup>®</sup>



Pumping your septic system is only a temporary solution to the continual buildup of clogging substances. This septic system buildup ultimately culminates in unpleasant emergency situations that infiltrate your yard and home, and often leads to lofty system repair or replacement costs.

How do you avoid costly maintenance, repairs, replacements or excavation both today and in the long term?

The answer is rather simple: oxygen.

## Why Anaerobic Bacteria Is Bad For Your Septic System

Your septic tank essentially works like an ecosystem. Incoming sewage or effluent enters into the septic tank containing both oxygen-loving (aerobic) and oxygen-hating (anaerobic) bacteria. In other words, aerobic bacteria need oxygen to live, and anaerobic bacteria thrive on the lack of oxygen.

In fact, “septic” refers to the anaerobic bacterial environment that develops in the tank.

Most septic tanks do not contain oxygen, so the good, aerobic bacteria die off once entering the septic environment. The job of breaking down organic solids and gas is left to the oxygen-hating anaerobic bacteria.

If anaerobic bacteria are growing and merging (and eventually conquering), this means your septic system is woefully out of balance, which eventually leads to expensive septic system issues.

## Anaerobic Bacteria Emits A Rotten Egg-Like Odor

If you smell a foul odor emitting from your indoor faucets or outside of your home near your septic tank, this is likely the result of the presence of anaerobic (oxygen-hating) bacteria. The odor is a by-product of the bad bacteria winning, as it produces corrosive hydrogen sulfide gas when breaking down organic solids.

The anaerobic bacteria will also create nitrates, which in large quantities is toxic and eventually seeps into the local water table.

## Less Strain On Your Septic System

An aerobic septic system reduces wastewater strength by more than 90% in the septic tank, so the drain field must perform only 10% or less of the water cleansing. Compared to the inefficiency of anaerobic bacteria – which only reduces wastewater strength by 30%, so the drain field must perform 70% of the water cleansing – the system becomes more susceptible to breakdowns and develops a clogging biomat layer.





## Anaerobic Bacteria Proliferates Unwanted Biomat Growth

Unxygenated bacteria are common culprits of septic system failure. When forming large colonies and migrating from the septic tank to the drain field, they accumulate and form a clogging layer known as biomat. Biomat is a sludgy, slimy layer of live anaerobic bacteria and its by-product.

Over time, in an oxygen-lacking environment, the biomat builds up and seals the ground and sidewalls of the drain field, preventing it from absorbing water discharged from the septic tank. This results in a variety of unfortunate and costly septic system problems: ponding, sluggish toilets and drains, tank overflows and system backups.

## The Benefits Of Introducing Aerobic Bacteria To Your Septic System

Aerobic septic systems induce extra oxygen dissolved in the wastewater to support those oxygen-loving microorganisms that decompose dissolved organic and nitrogen compounds. The aerobic bacteria work to reduce the amount of nutrients in the septic tank effluent, which biomat needs to survive and proliferate.

As aerobic bacteria thrive from the oxygen-rich environment, they digest the organic material in the septic tank. As the biomat confronts “starvation,” it shrinks back. Also, the aerobic bacteria that leave the septic tank with oxygenated wastewater continue to reduce the biomat until it is completely gone.

This is why, in many cases of failing septic systems, the transformation to aerobic bacteria restores the systems back to working condition.

## How Effective Are Aerobic Septic Systems Over Time?

Using the patented Aero-Stream® Controlled Aeration™ process, over 98% of septic systems corrected with aerobic bacteria go on to operate without additional symptoms of failure. The other 2% require some addition to the size of the soil absorption area, which was likely too small to begin with or there was some type of mechanical issue with the system components.

## Smell That? You're Not Supposed To.

Oxygen-hating bacteria in standard septic tanks produce an odious odor, which is actually corrosive hydrogen sulfide gas. The respiration process needs to have atoms and molecules willing to accept electrons. While anaerobic respiration settles for sulfate, aerobic respiration uses oxygen, one of nature's best electron acceptors – this produces only an earthy, topsoil-like scent.



The Aero-Stream® Controlled Aeration process provides a high degree of treatment with minimum maintenance to hedge against organic overload in the system and eliminate biomat production.

However, this doesn't mean that maintenance is optional. As with any mechanism that's working year round, regular inspections ensure all parts are functioning properly. If the parts are all in working order, an aerobic septic system achieves the highest possible level of wastewater treatment.

## A Low-Cost Solution To Installing An Aerobic Septic System

Aerobic septic systems have come a long way in the last 50 years. There are patented and proven low-cost alternatives that restore and maintain septic systems and require no expensive and disruptive excavation or harsh, toxic chemicals.

The latest innovation in aerobic septic systems may be installed in under an hour and designed specifically to fit any existing septic system. It's highly recommended you look for a remediation system that's designed to address your maximum occupants and ensure optimal performance.

**Ready to learn more about the latest innovations involving aerobic bacteria to optimize the performance of your septic system? Call 877-254-7093 or [click here to speak directly with a knowledgeable expert at Aero-Stream.](#)**



**aero-stream**

W300N7706 Christine Lane  
Hartland, WI 53029

TOLL FREE: (877) 254-7093  
[info@aero-stream.com](mailto:info@aero-stream.com)

## The Aerobic Bacteria Speed Advantage

When the naturally occurring aerobic bacteria dominate your septic system, organic materials are broken down at an explosive rate. In fact, aerobic bacteria consume 20-30 times *more* organic materials than anaerobic bacteria.