

Septic Tanks Pose Serious Threats to Health and Quality of Life for Millions



Millions of failing septic systems in the United States are currently destroying environmental quality of life for millions of Americans as well as cultivating killer algal blooms and red tides that imperil the nation's water supply and wildlife.

Once popular and considered an easy solution for homeowners not connected to a municipal sewer system, backyard septic tanks pose a danger to drinking water supplies and the quality of life for millions of people around the country.

The U.S. Census Bureau estimates there are about 22 million households that rely on septic systems for their wastewater treatment. According to the U.S. EPA, more than one in five households utilize onsite sewage treatment and disposal systems, such as septic, cesspits, latrines and straight pipes, and the agency believes “leaking, malfunctioning and worn-out septic tanks are responsible for most of the groundwater pollution in the U.S. today.”

Every year, more than 75 million people flush more than 1 trillion gallons of water and household waste into more than 20 million septic tanks all around the country. As reported in the Canter & Knox study “Septic Tank System Effects on Groundwater Quality” done for the EPA, an average of 40 percent of these septic tanks don’t function properly. The tanks fail eventually, dumping hundreds of millions of gallons of raw, untreated wastewater and other toxic materials into the ground—at times into the nation’s water supply.

Septic Problems

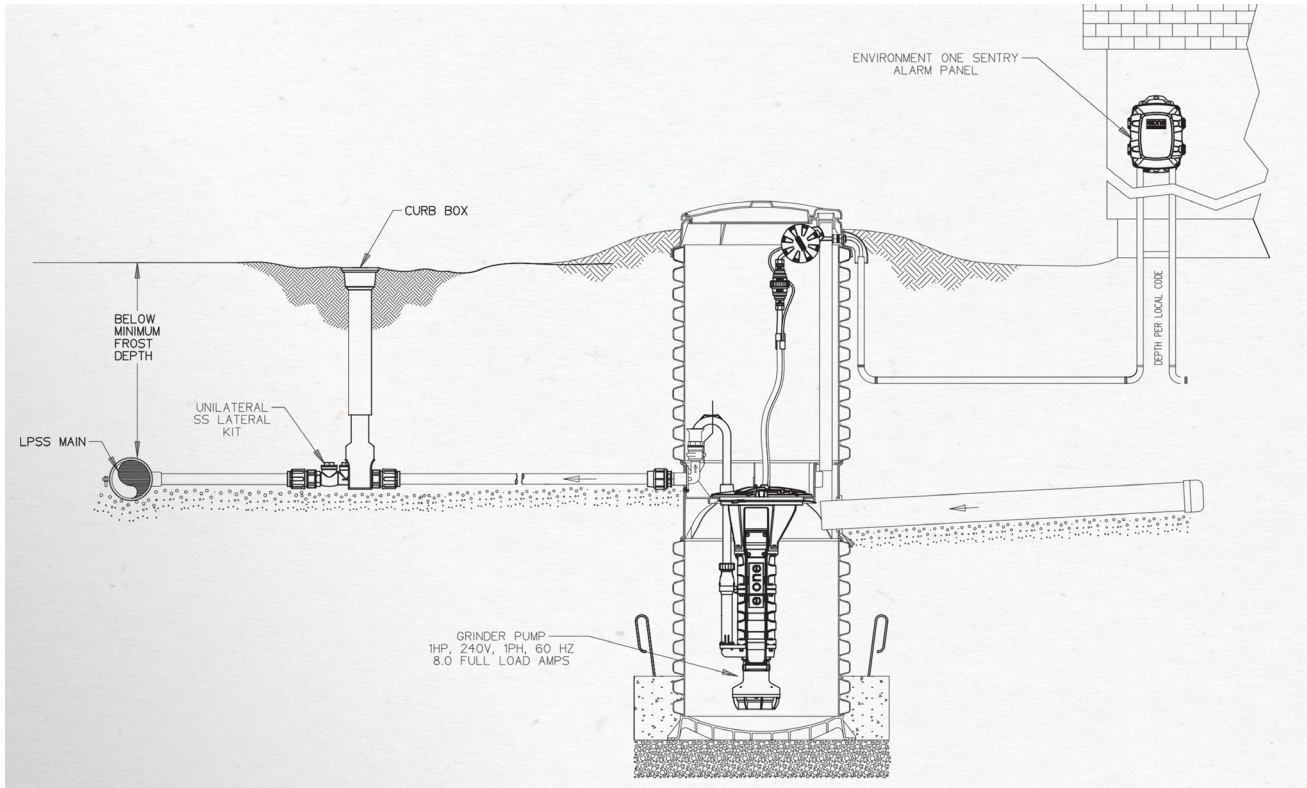
Septic tanks were first introduced to the United States in 1884, and due partially to their initial low cost,

quickly became the most widely used method of sewage treatment and disposal. The EPA says more than 25 percent of all new home construction in this country employs septic tank systems to manage raw sewage disposal. Since most septic tanks and systems currently in use were installed during the building boom of the 1960s and have a normal life expectancy of 10 to 40 years, time has run out for millions of septic tanks.

The major problem with septic tanks is they contain significant amounts of bacterial pathogens. The effluent also contains viral pathogens, which can and do pose a serious public health problem. Currently, no national enforcement standards exist for keeping viruses out of public and private water supplies, further exposing the public to increased risks of illness and death.

For example, the Center for Disease Control and the EPA have found and reported that an average glass of water supposedly fit for healthy people may not be good enough for sick people to drink. Few people concern themselves with the more than 100 possible organic and inorganic constituents of a glass of water. How the water looks, smells and tastes draws the most attention.

But drinking water isn’t the only problem. Thousands of lakes, streams, rivers, bays, estuaries, and other bodies of water are being threatened and polluted every day. The systematic failure of septic tanks around the country has a negative economic and personal impact.



E/One's ALL-TERRAIN sewer system is a pressure sewer system that uses E/One grinder pumps. Grinder pumps are installed at each home, collect the wastewater and pump it to a larger sewer main or directly to a wastewater treatment plant.

A Better System

There is a better, more-appropriate wastewater collection and transport solution: an ALL-TERRAIN pressure sewer system driven by purpose-built grinder pumps. It's an economical and highly reliable central sewer system that can literally go anywhere for less cost and with far less destruction to the environment than conventional gravity sewers.

From an economic perspective, conventional gravity-controlled sewer systems can be and are usually extremely cost intensive, as many communities are discovering. Federal funding for these massive projects in the recent past has dried up, making construction of such systems even more difficult and expensive. As a result, many communities are looking for a better, more-cost-efficient solution.

Conventional gravity sewers use a 24-inch-diameter or larger pipe or main, which automatically requires major excavation and severely disrupts the surrounding landscape and existing infrastructure. E/One's ALL-TERRAIN pressure sewer employs a much smaller 2- to 4-inch main that can easily be installed just below the frost line, following the natural topography of the land, making for a much smaller environmental footprint.

The heart of this system is the E/One Extreme grinder pump, which offers a highly reliable and more-advanced solution than gravity-fed sewer systems. Combining low up-front costs, zero preventive maintenance, low operating costs, and the ability to be installed just about anywhere, the E/One solution represents a better choice for many communities.

Learn more at eone.com.



Pressure sewer installation utilizing directional drilling



Traditional cut-and-cover method for gravity sewer installation

