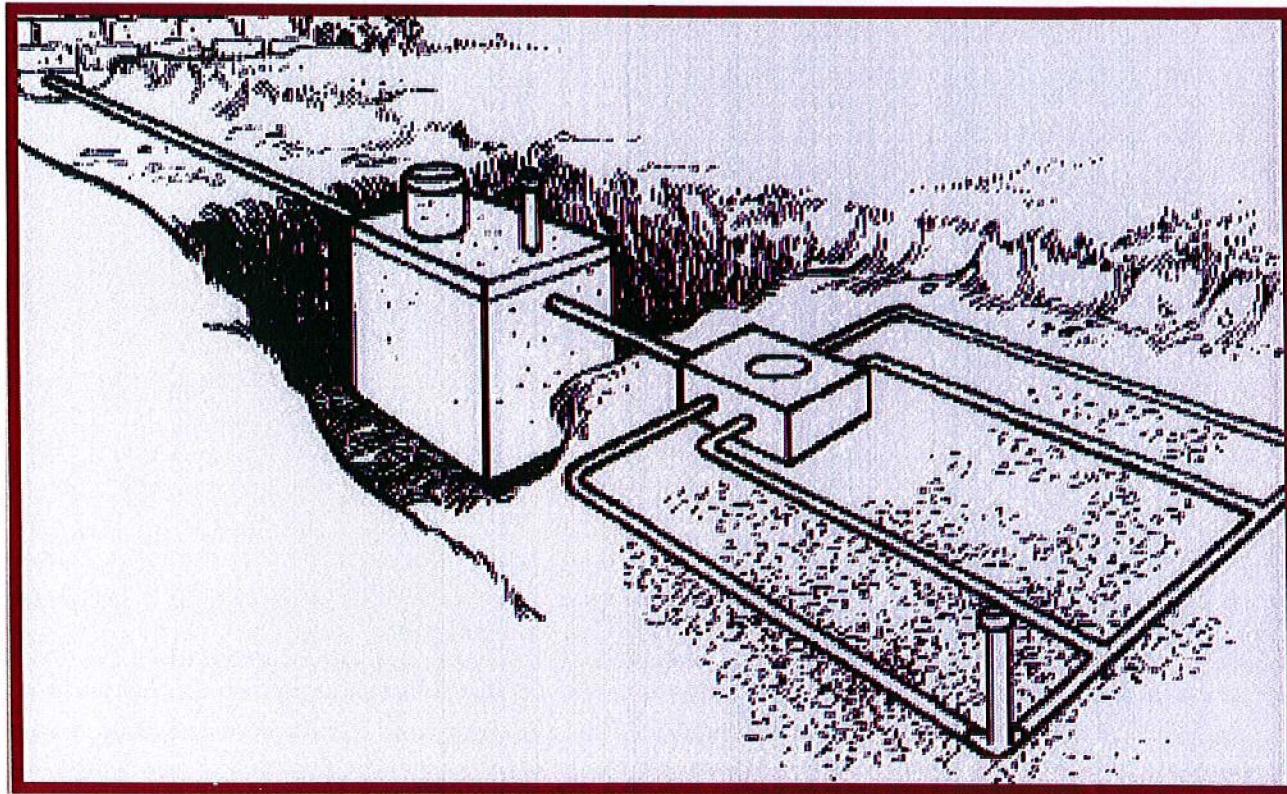


ON LOT SEPTIC SYSTEMS & THEIR OPERATION & MAINTENANCE



**This PowerPoint Presentation is based
on the document This OLDS House:
Managing Your On-Lot Disposal System
(OLDS) for Homeowners**

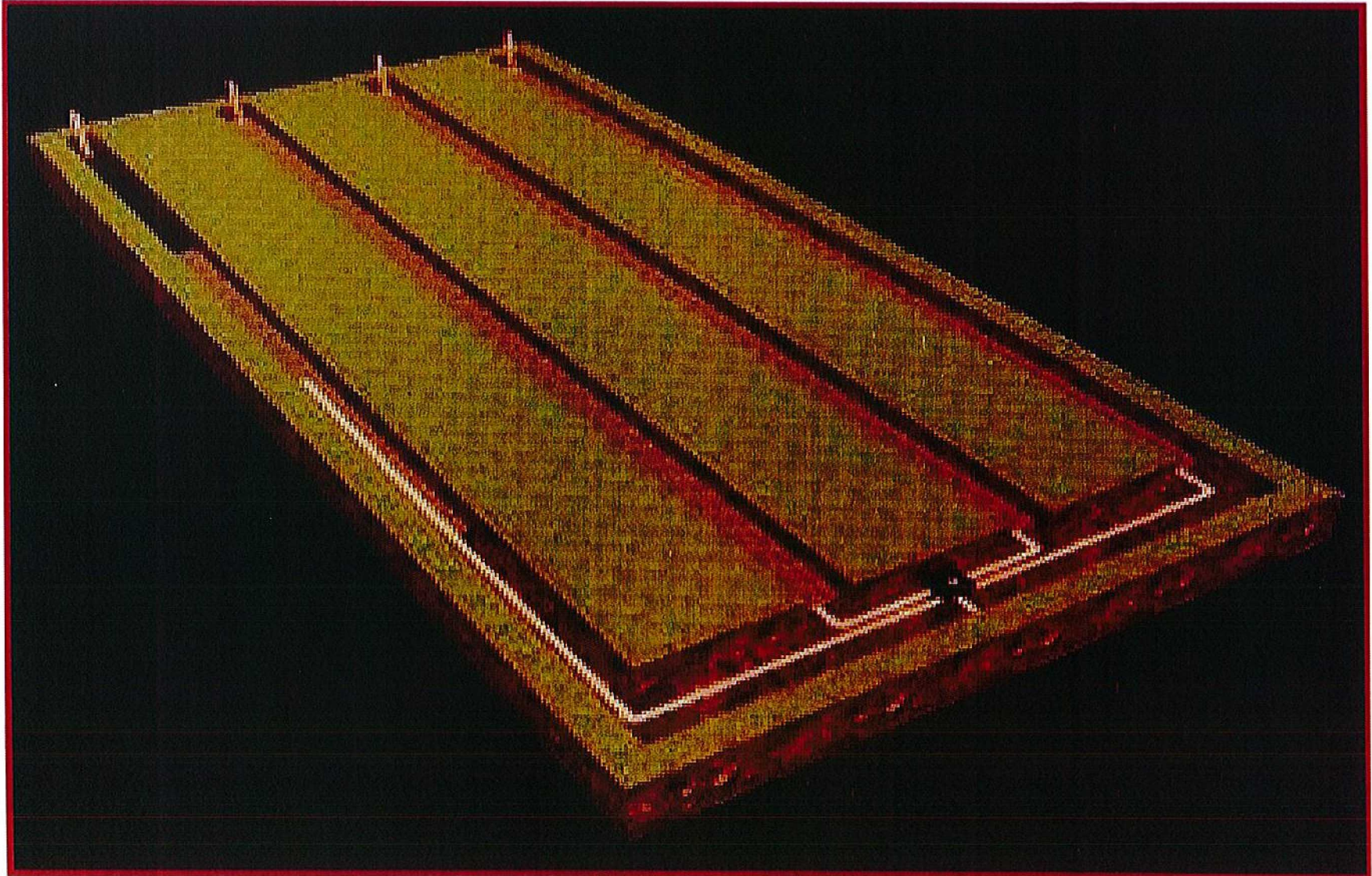
**Prepared By:
York County Conservation District**

**In Partnership With:
Pennsylvania Association of Conservation District
Pennsylvania Department of Environmental Protection
Penn State Cooperative Extension**

On-lot septic systems treat and dispose of domestic waste water on the properties where they are located.

**There are different types
of on-lot septic systems.**

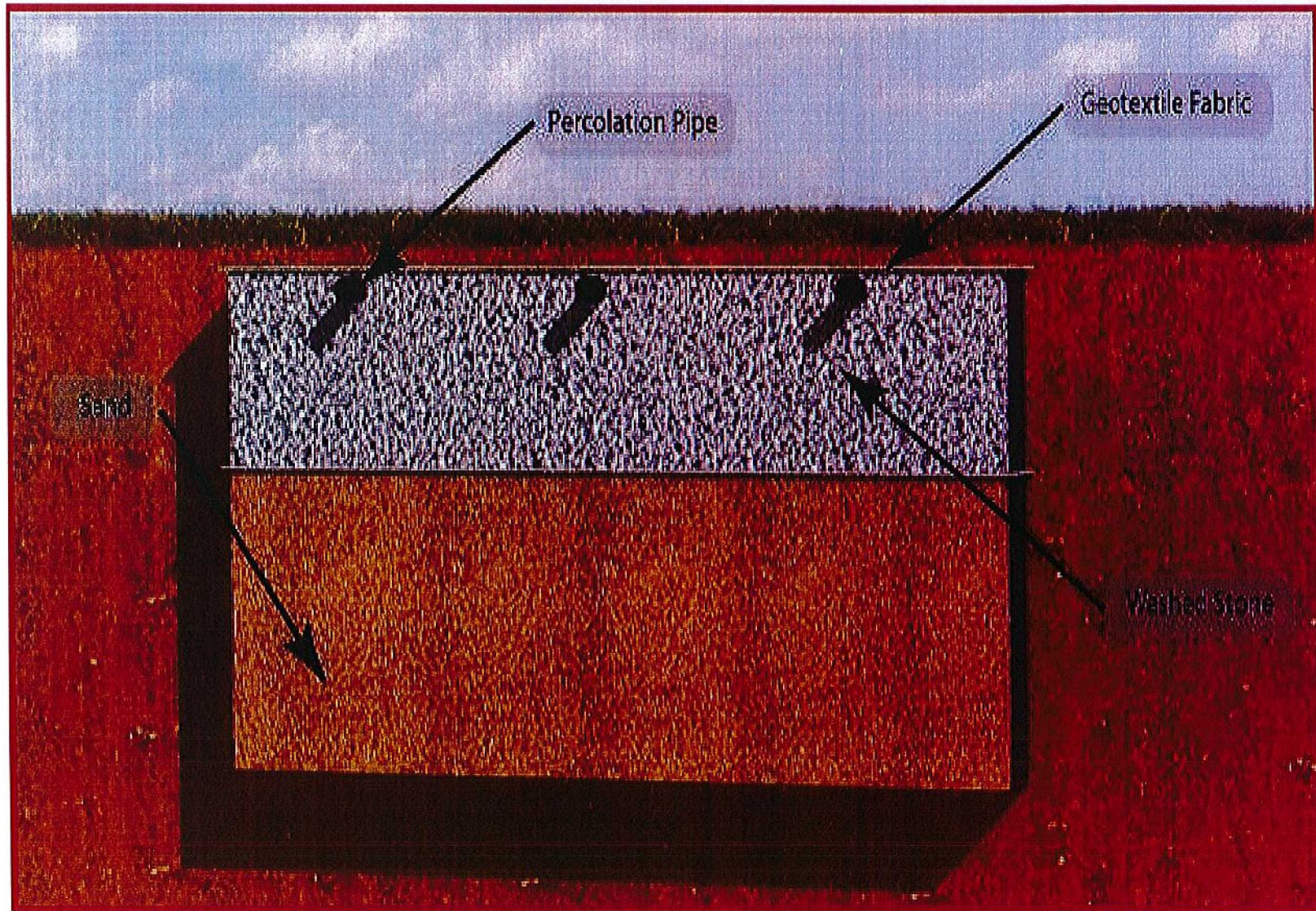
Trench systems deliver waste water to the soil via perforated pipes in stone trenches.



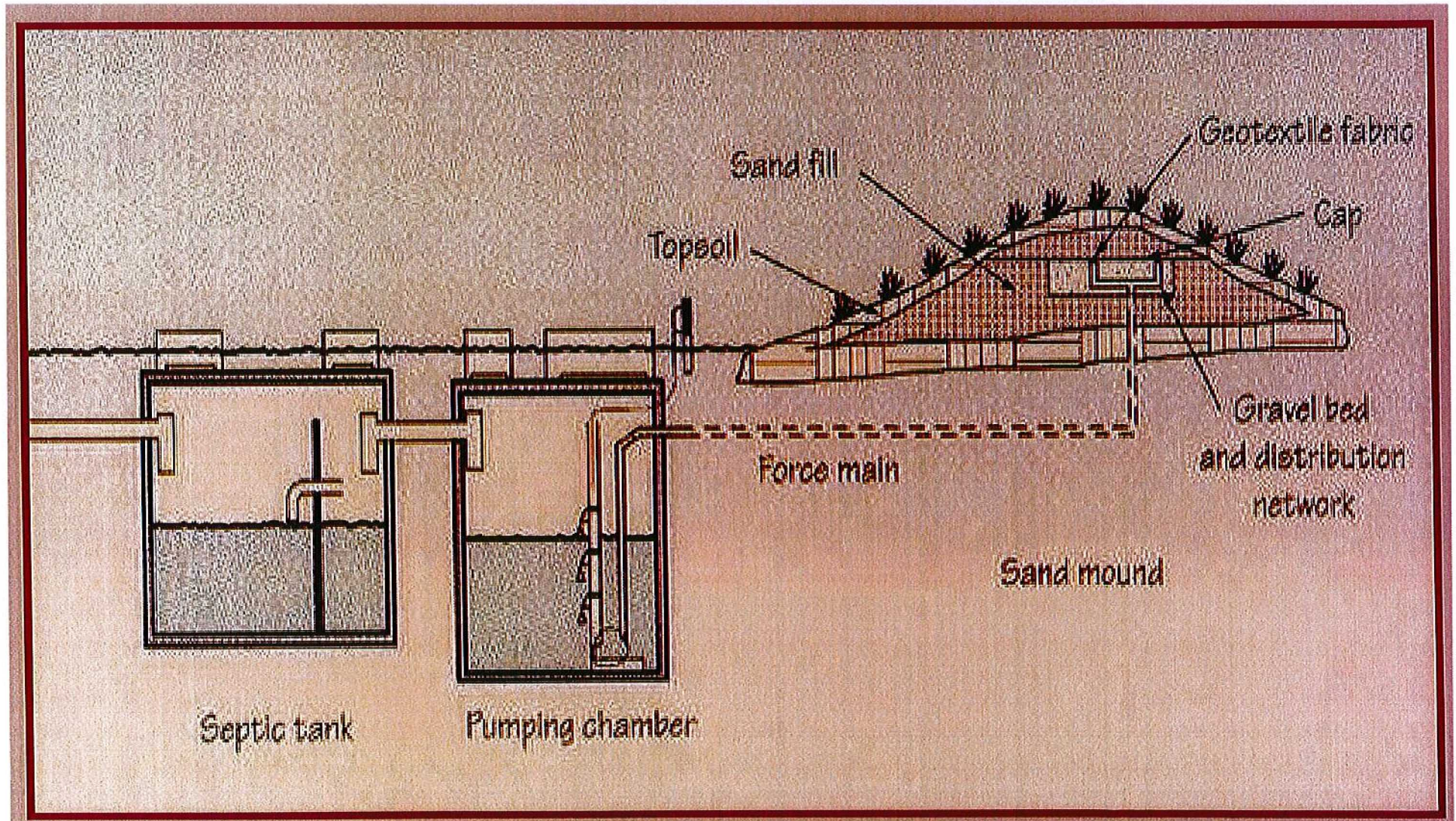
Seepage Bed systems deliver waste water to the soil via perforated pipes in the stone beds.



Subsurface Sand Filter systems deliver waste water to sand via perforated pipes in stone beds.

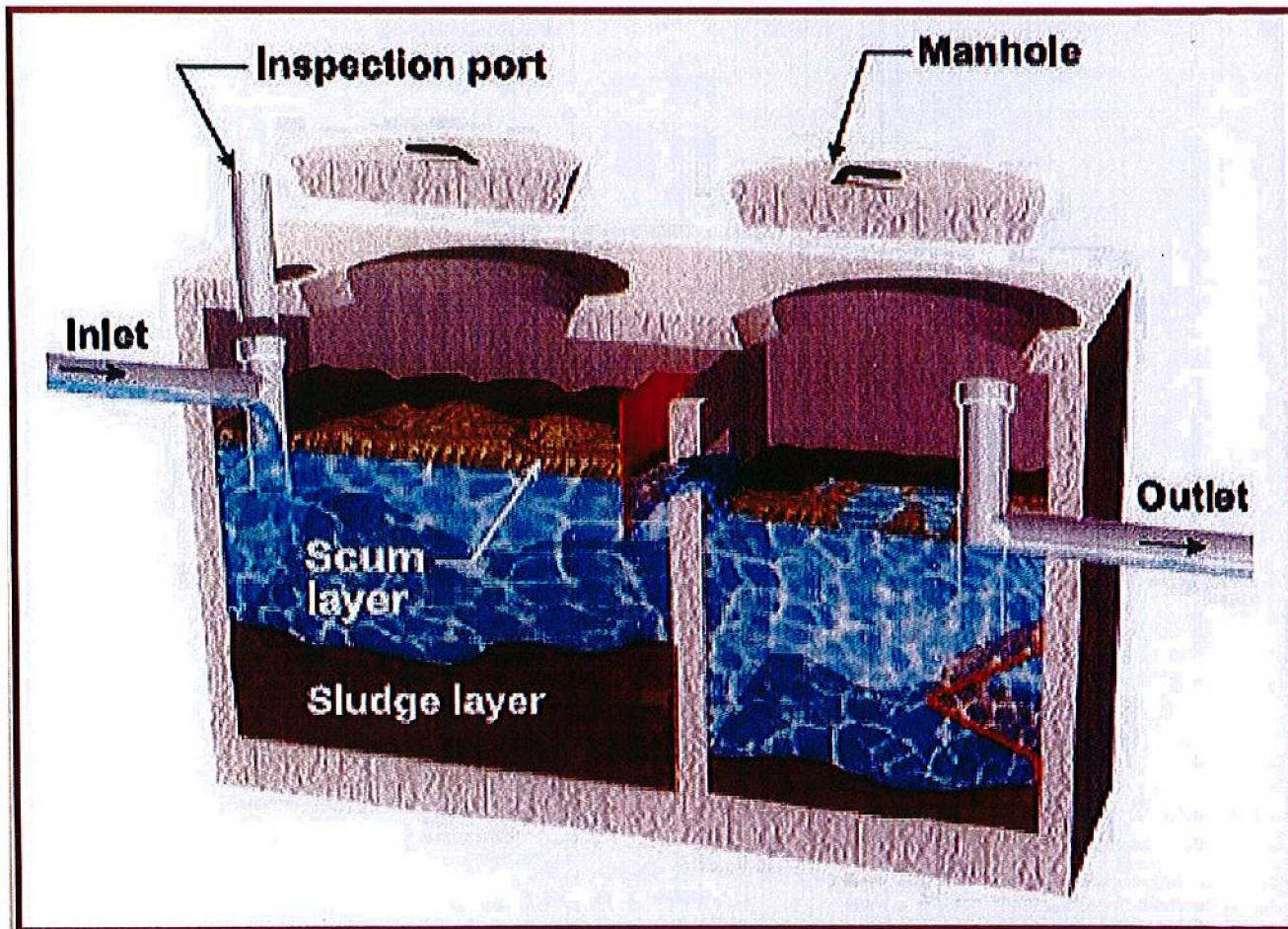


Elevated Sand Mound systems deliver waste water to sand via perforated pipes in stone beds.

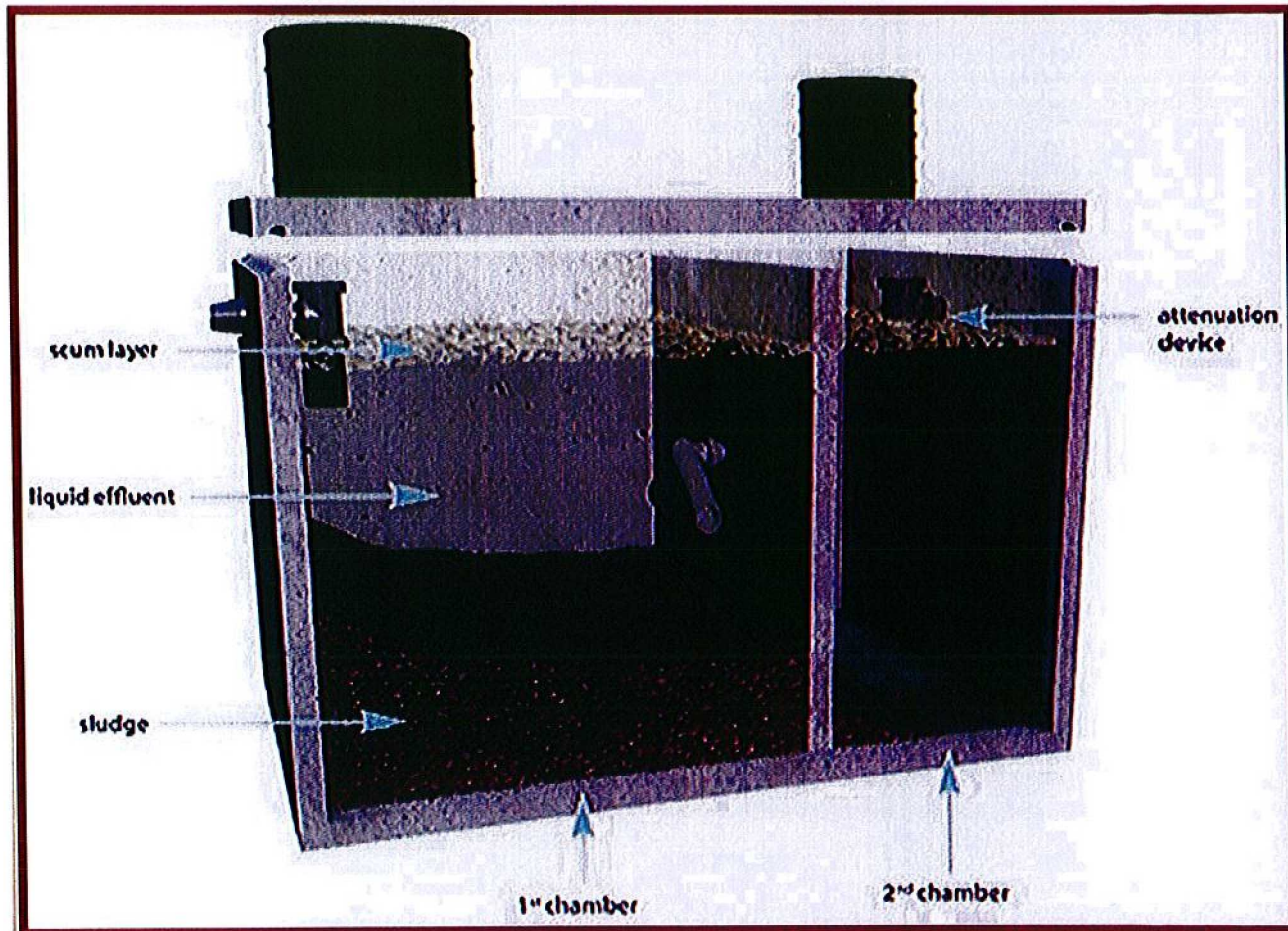


**How do on-lot
septic systems function?**

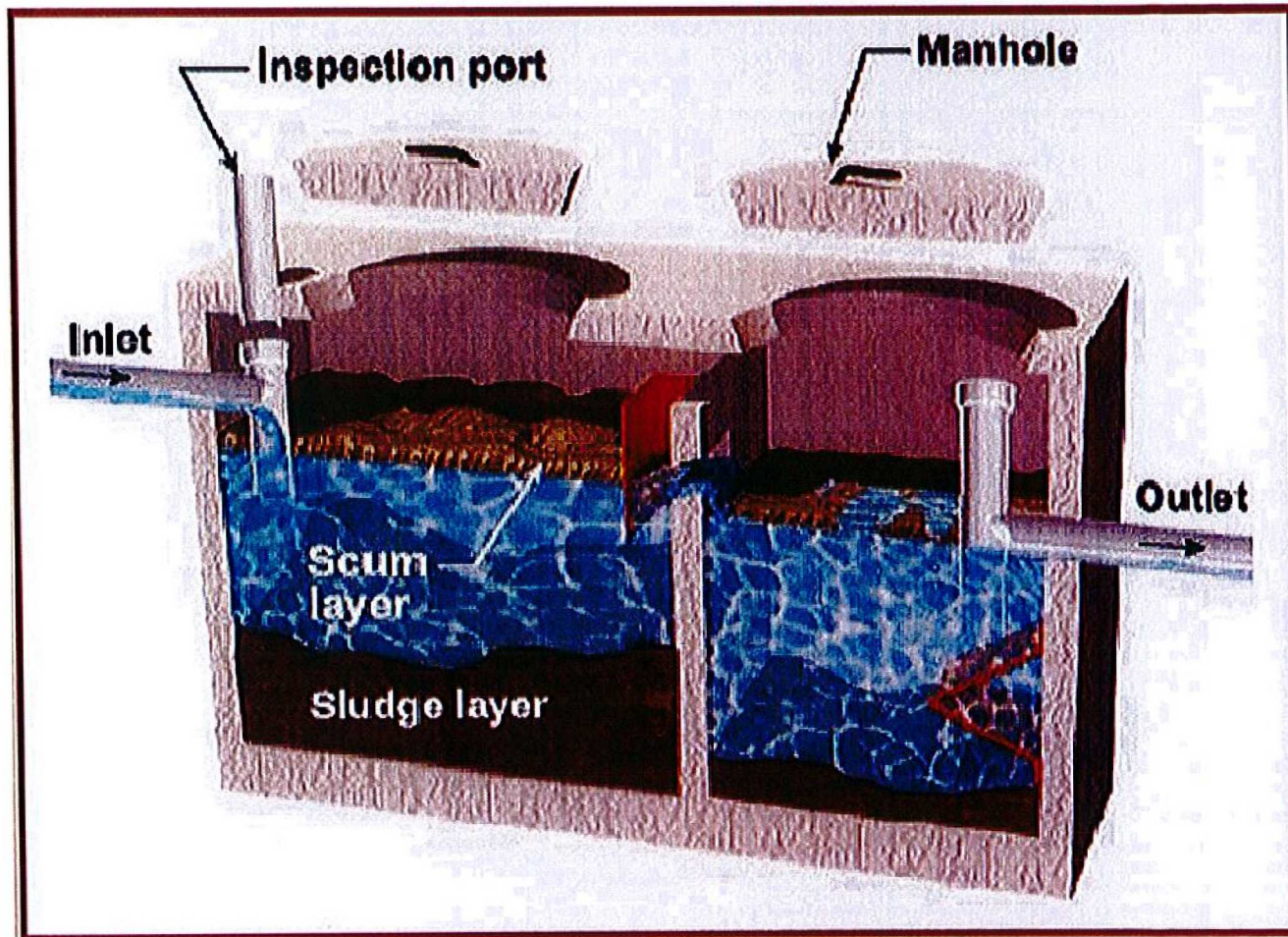
Waste water flows into the septic tank via the inlet.



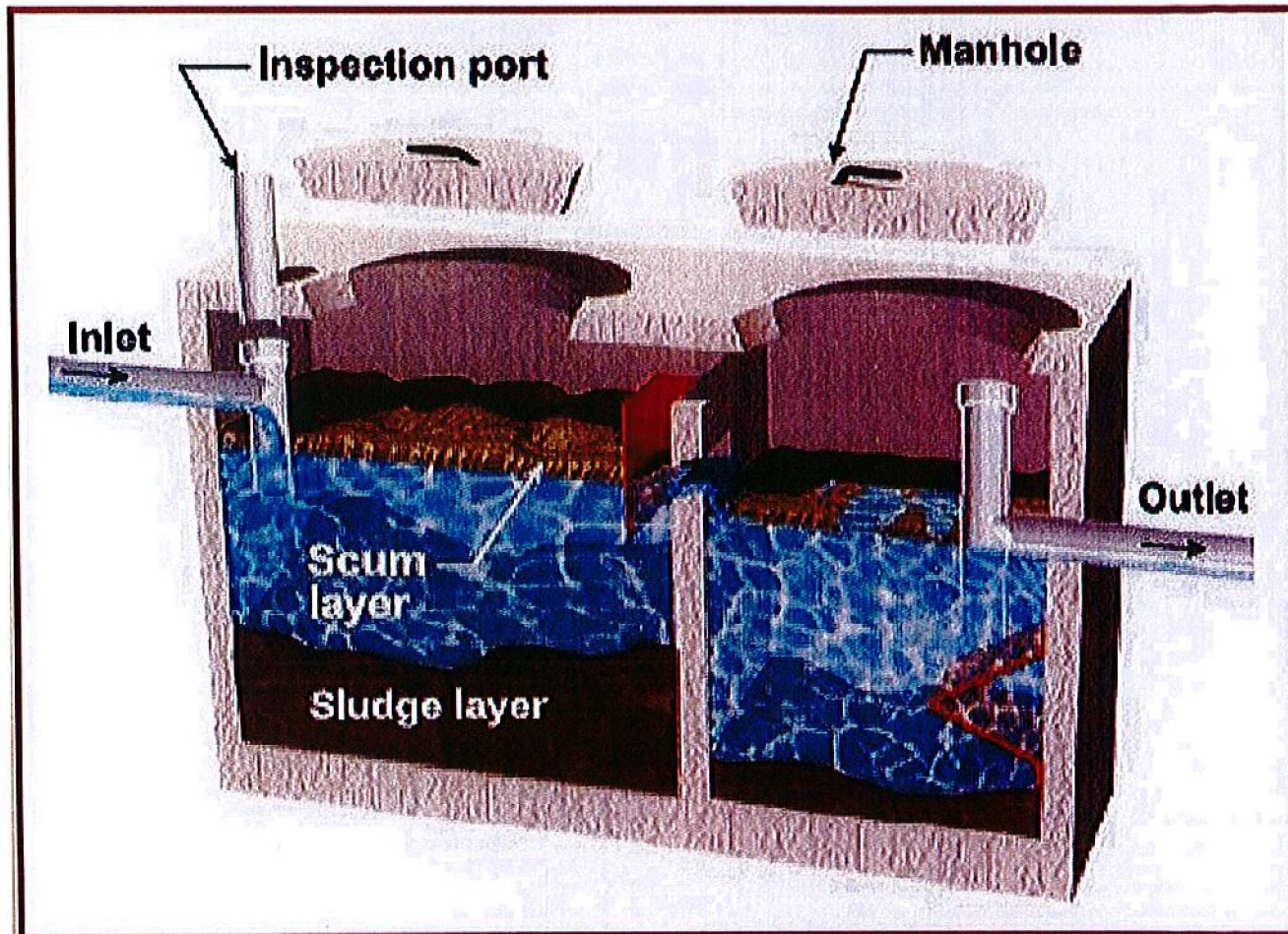
The inlet delivers waste water to the septic tanks 1st chamber.



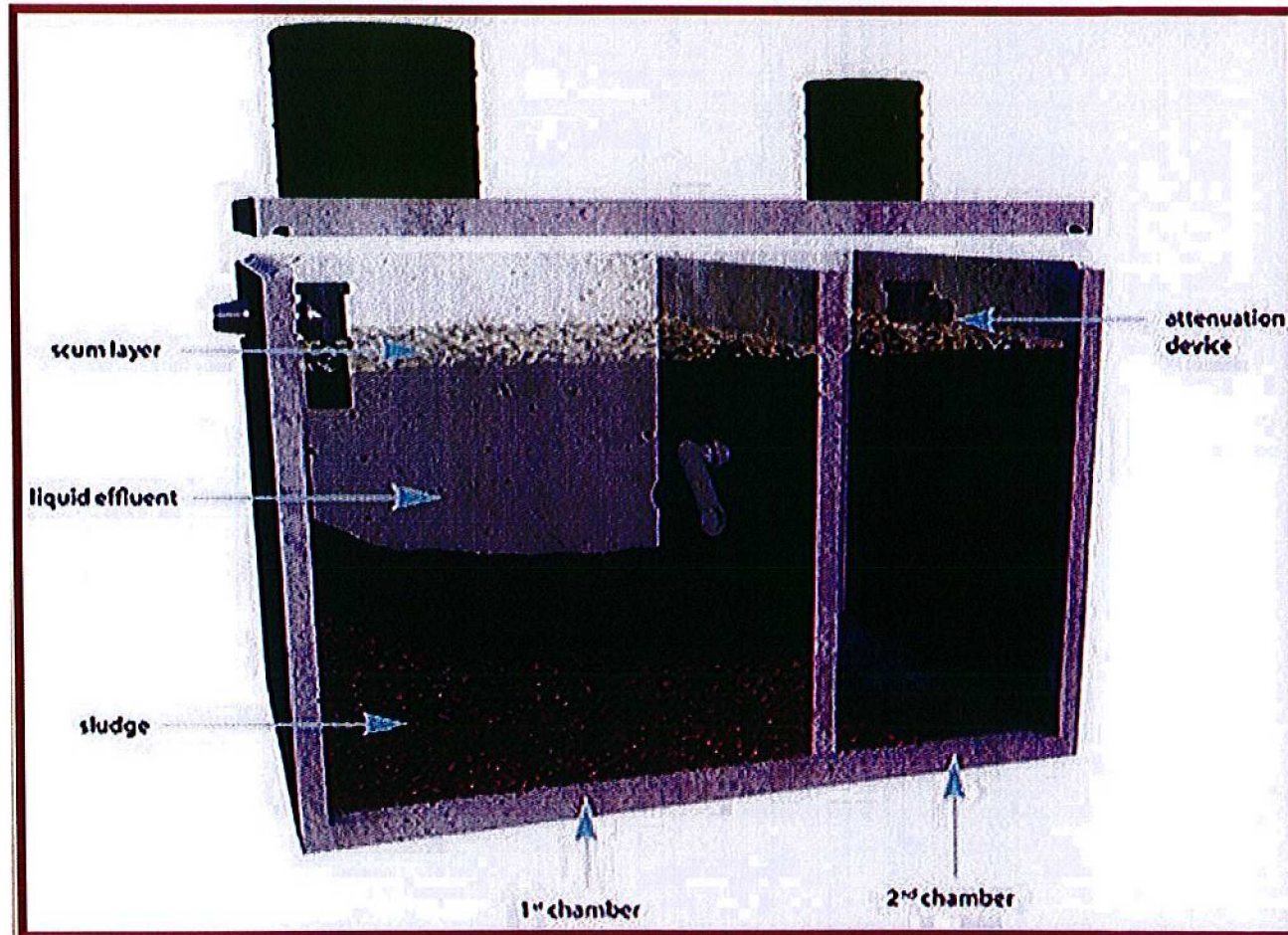
Matter heavier than water sinks to the 1st chamber's bottom, forming a **sludge layer**.



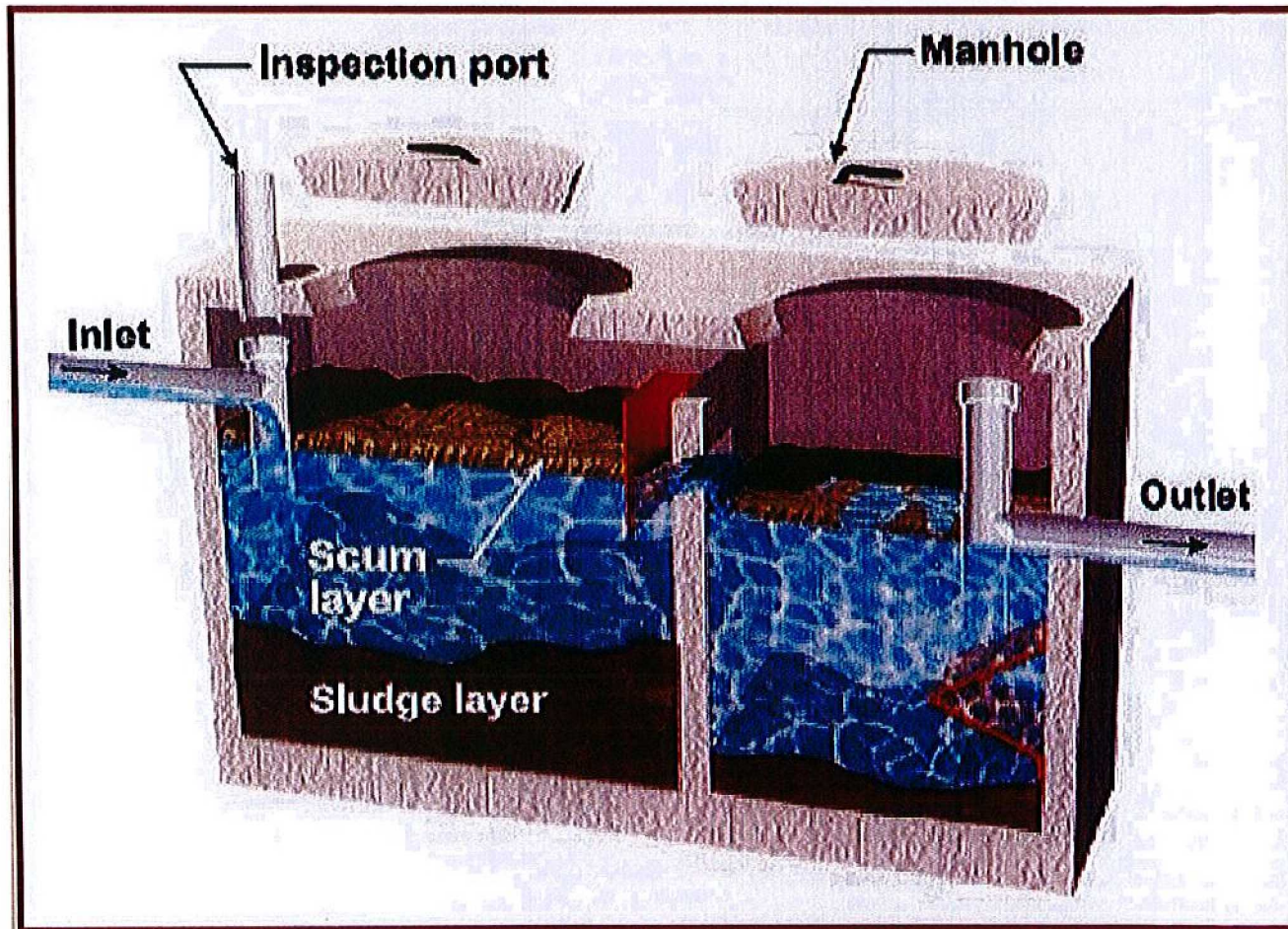
Matter lighter than water (fat, oil, grease, etc.) floats to the top, forming a **scum layer**.



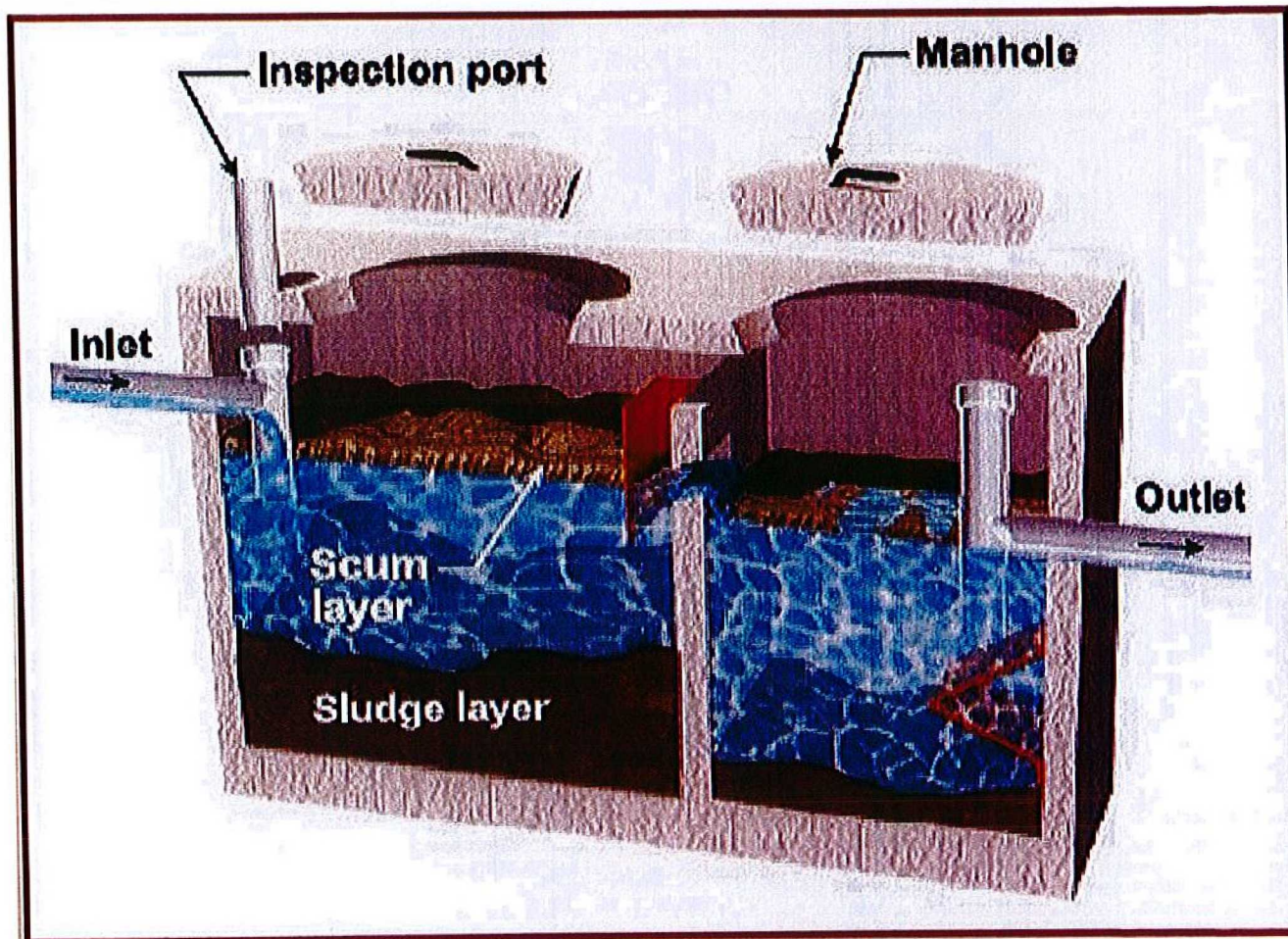
Waste water flows into the septic tanks
2nd chamber, where it is separated further.



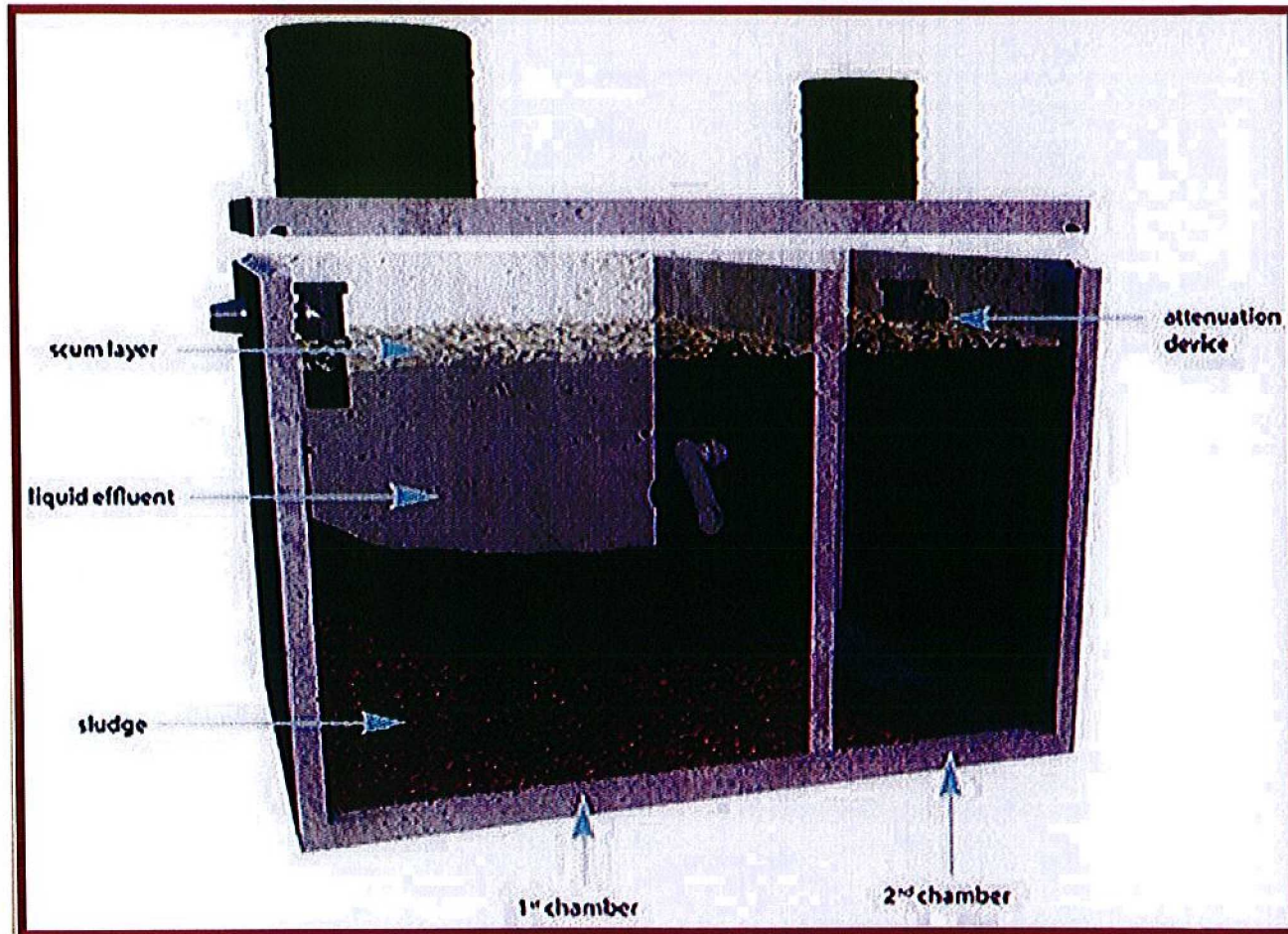
In the septic tank, the waste water is treated by beneficial organisms.



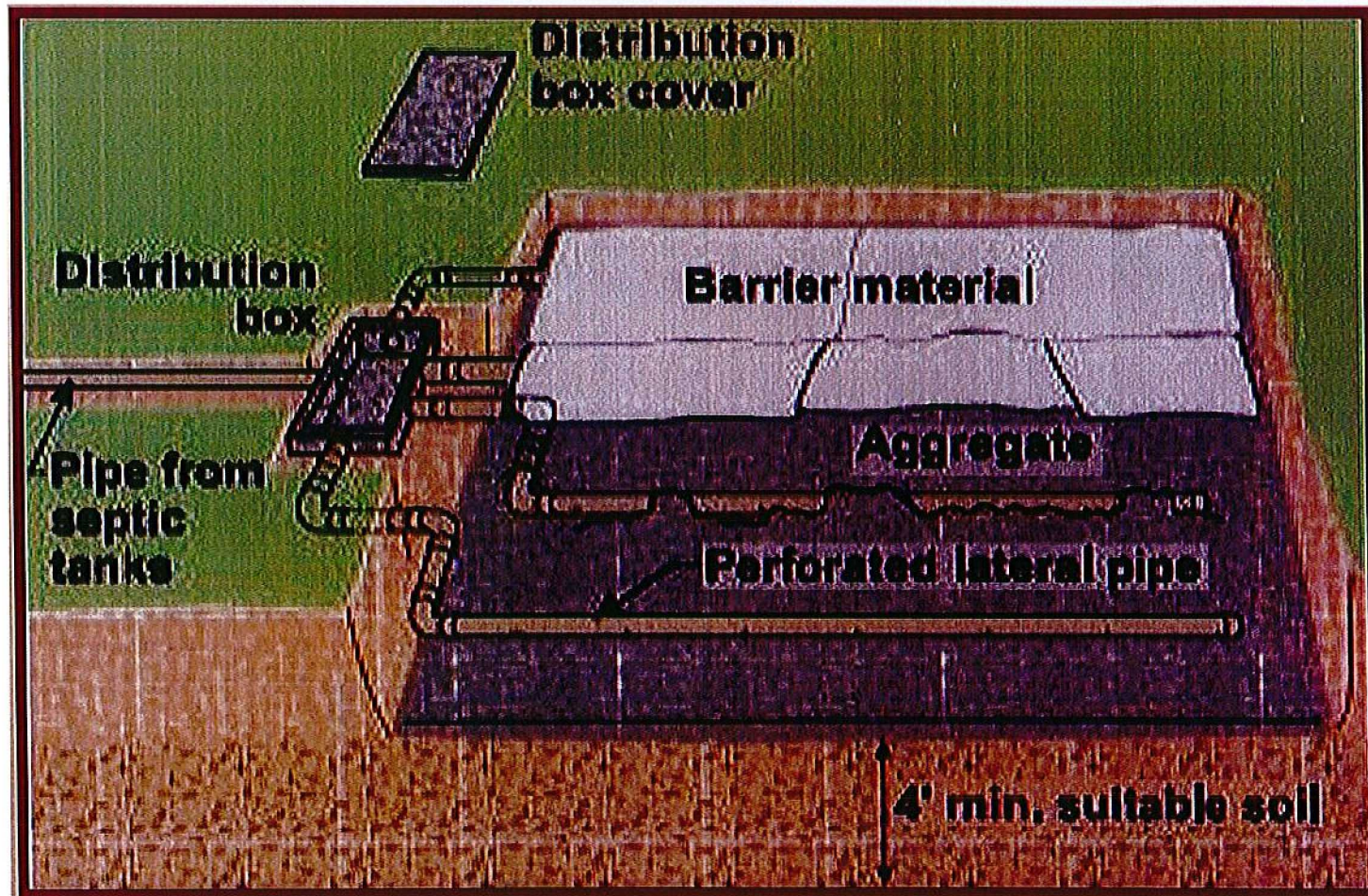
Clear waste water flows out of the septic tank via the **outlet**.



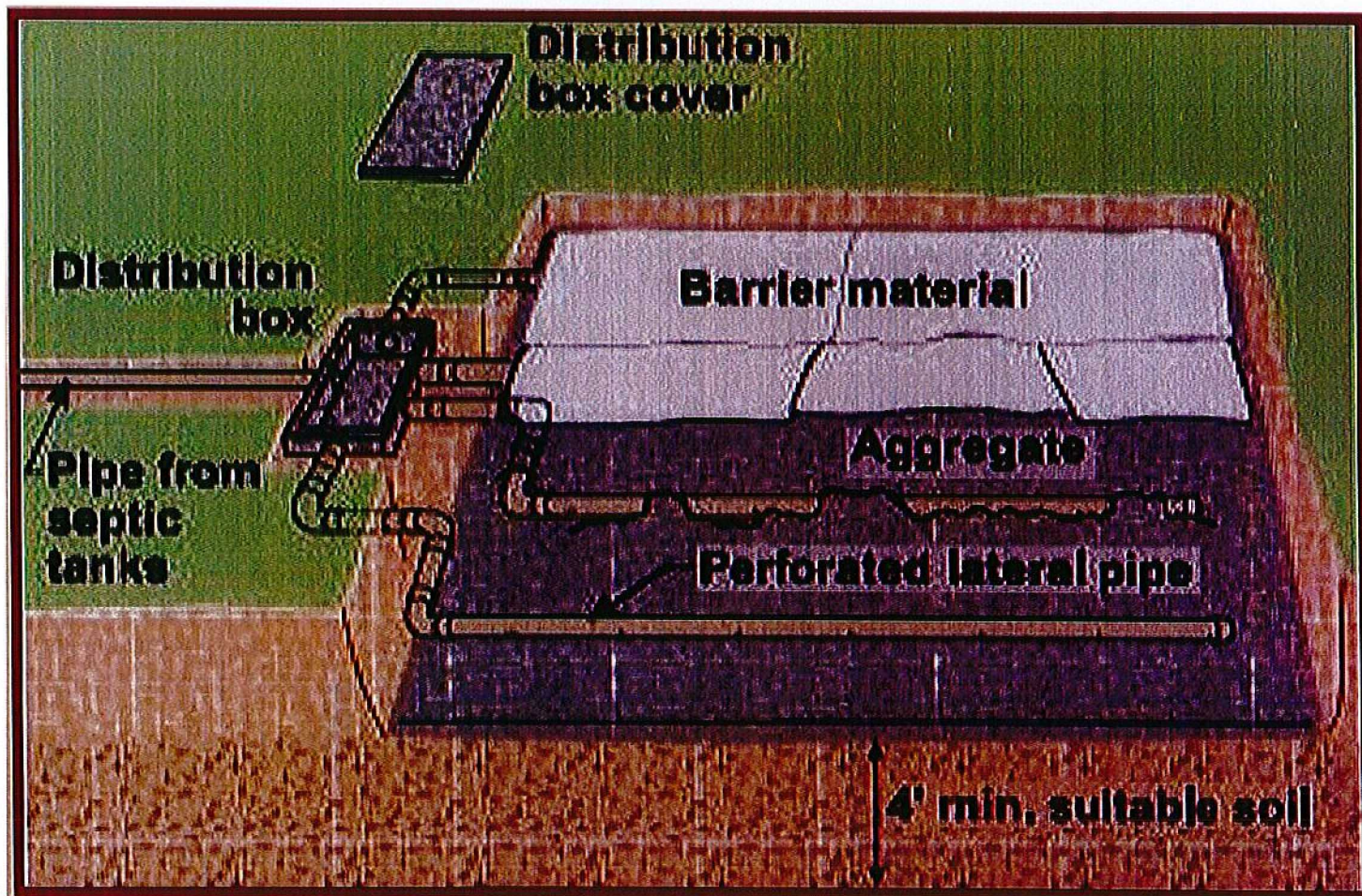
This clear waste water still contains disease causing bacteria, viruses, and other contaminants.



In gravity systems, the clear waste water flows into the **distribution box**.



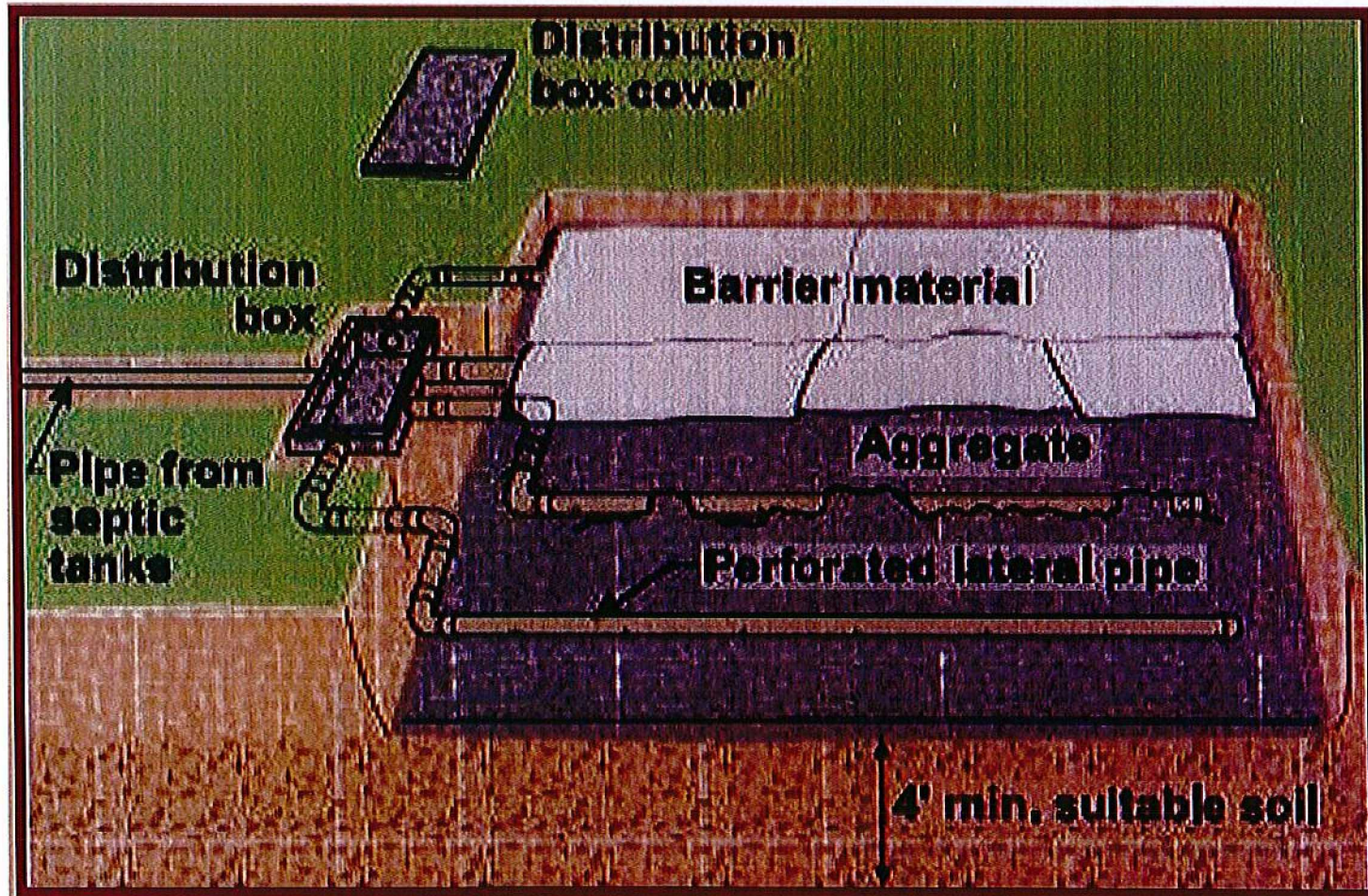
The distribution box disperses the clear waste water equally to **perforated later pipes**.



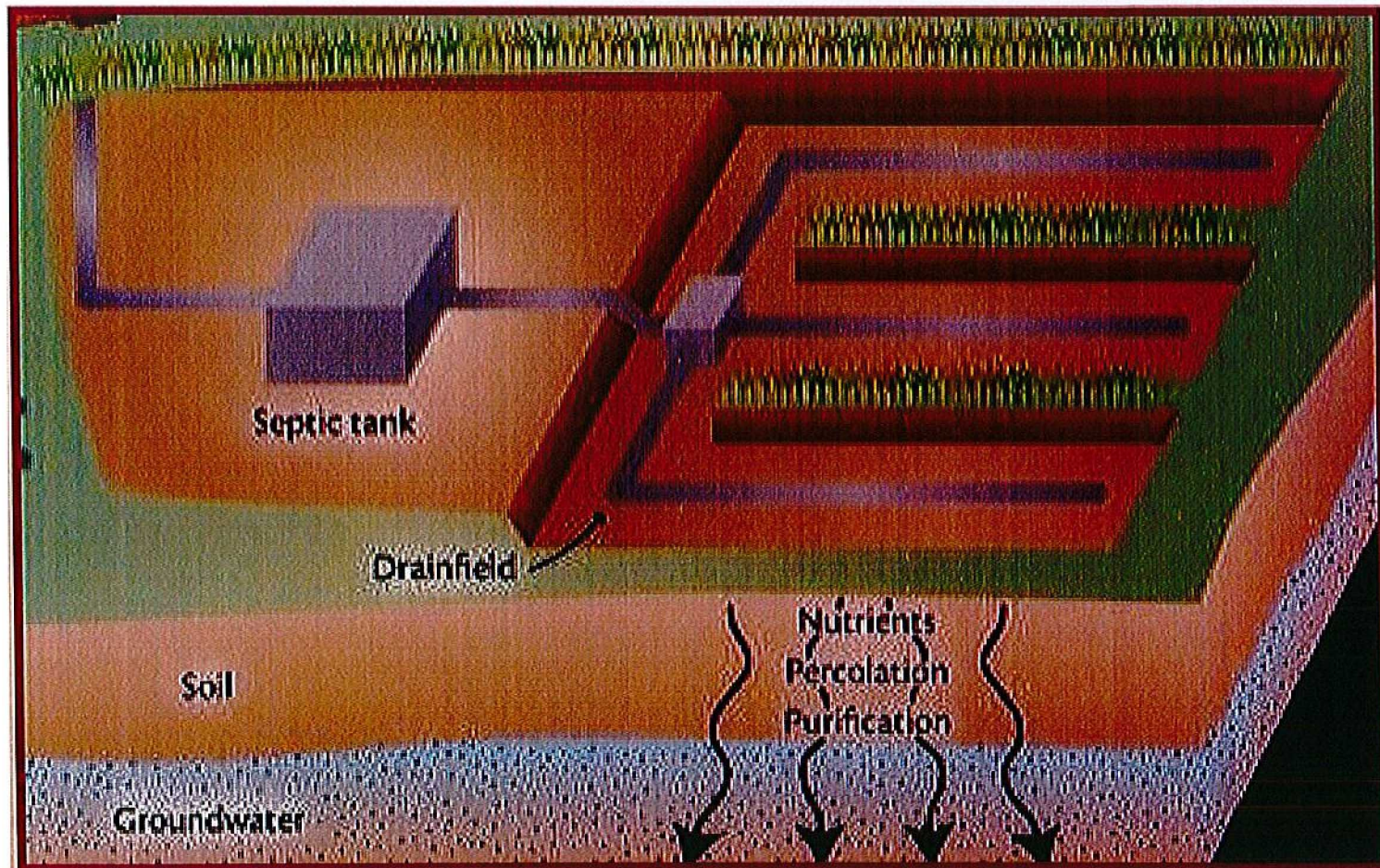
The **perforated lateral pipes** distribute the clear waste water throughout the **drainfield (aggregate)**.



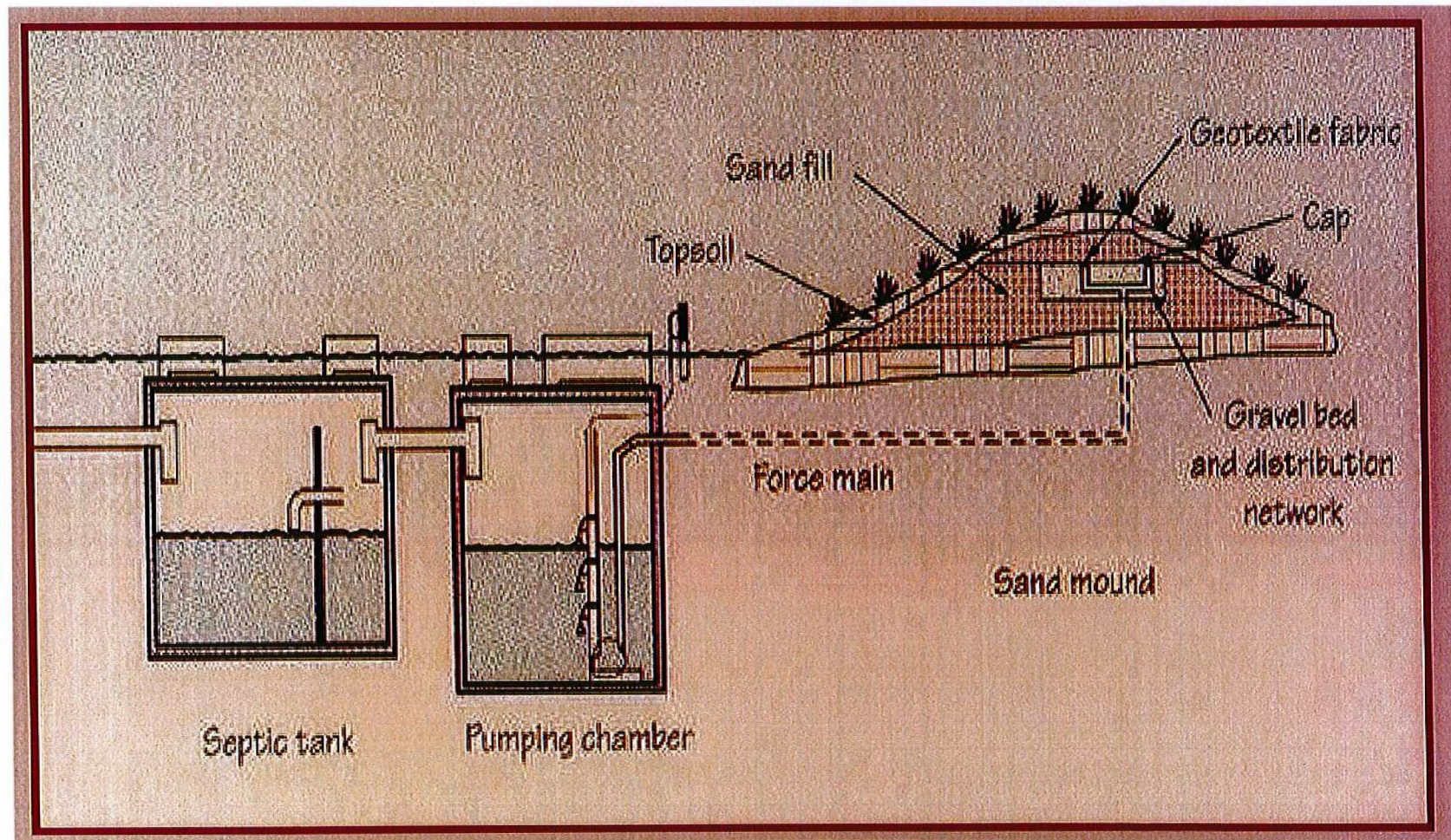
Clear waste water flows through the aggregate and into the suitable soil (soil).



Clear waste water percolates through the **soil** which removes **nutrients** and provides **purification**.

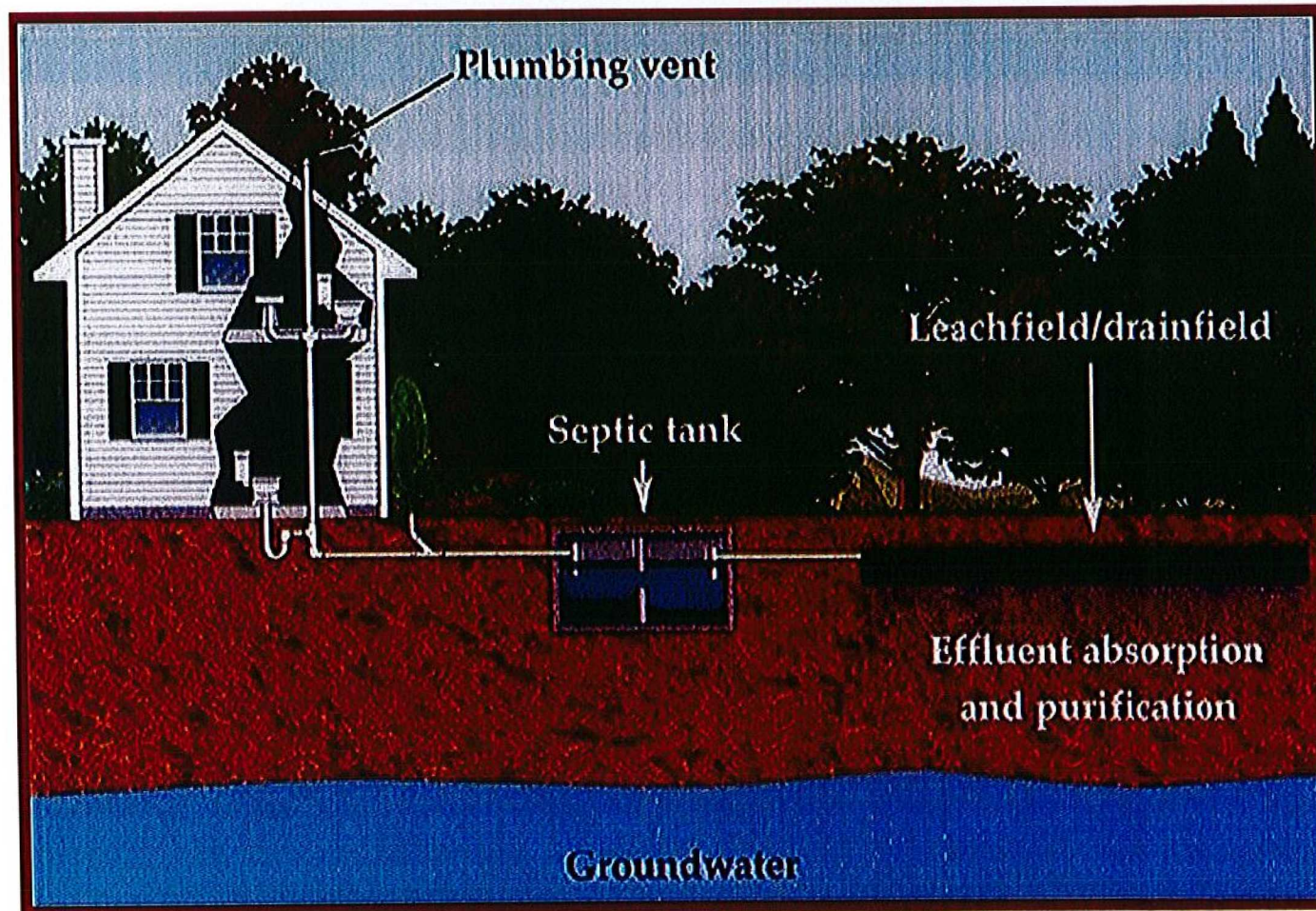


Where less than 4 feet of suitable soil is available for the **soil absorption area**, a pressure sand filter system may be an option.

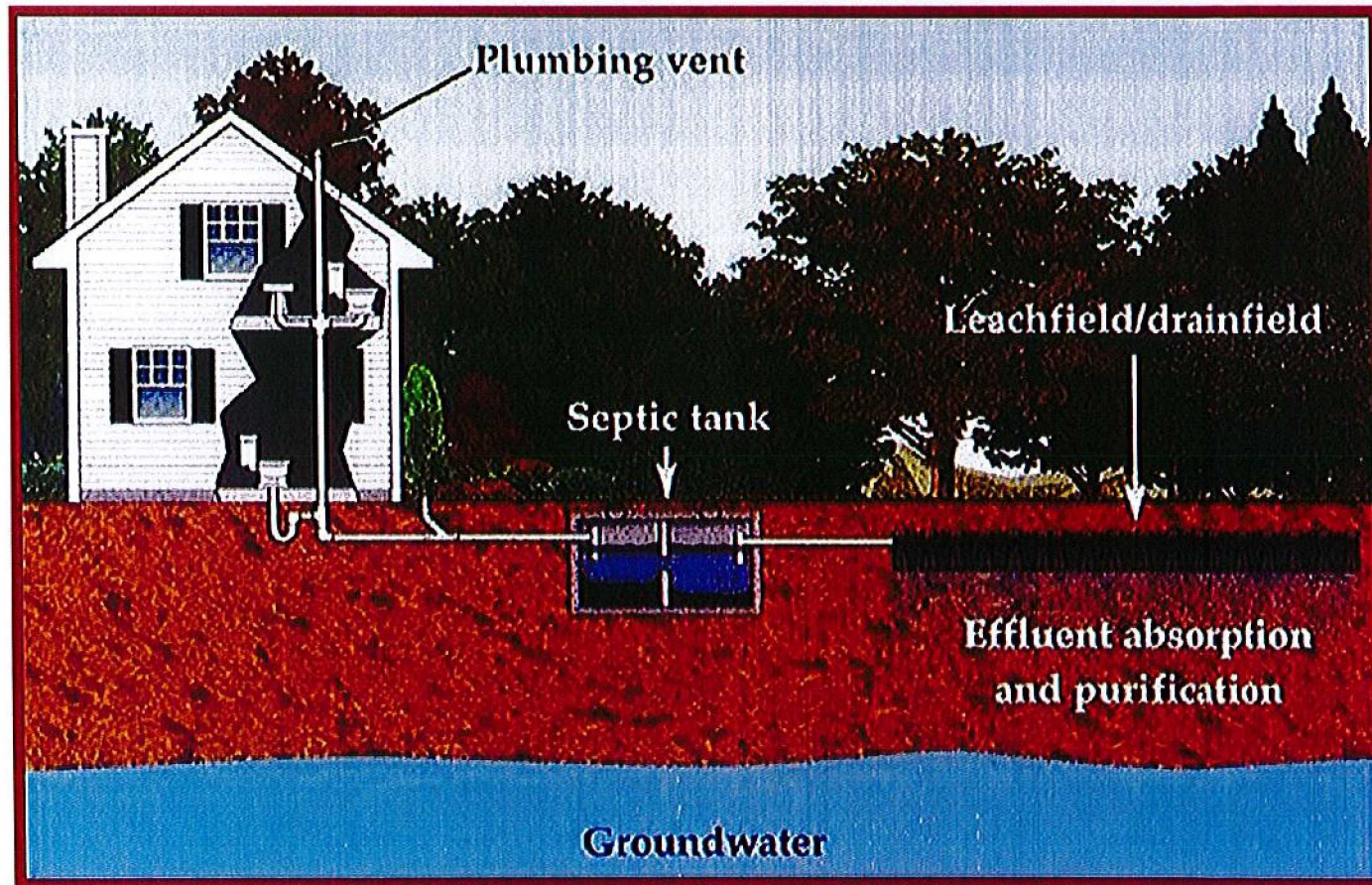


**Who operates
on-lot septic systems ?**

Property owners operate on-lot septic systems when they discharge waste water from kitchens, bathrooms, and laundries down house drains.

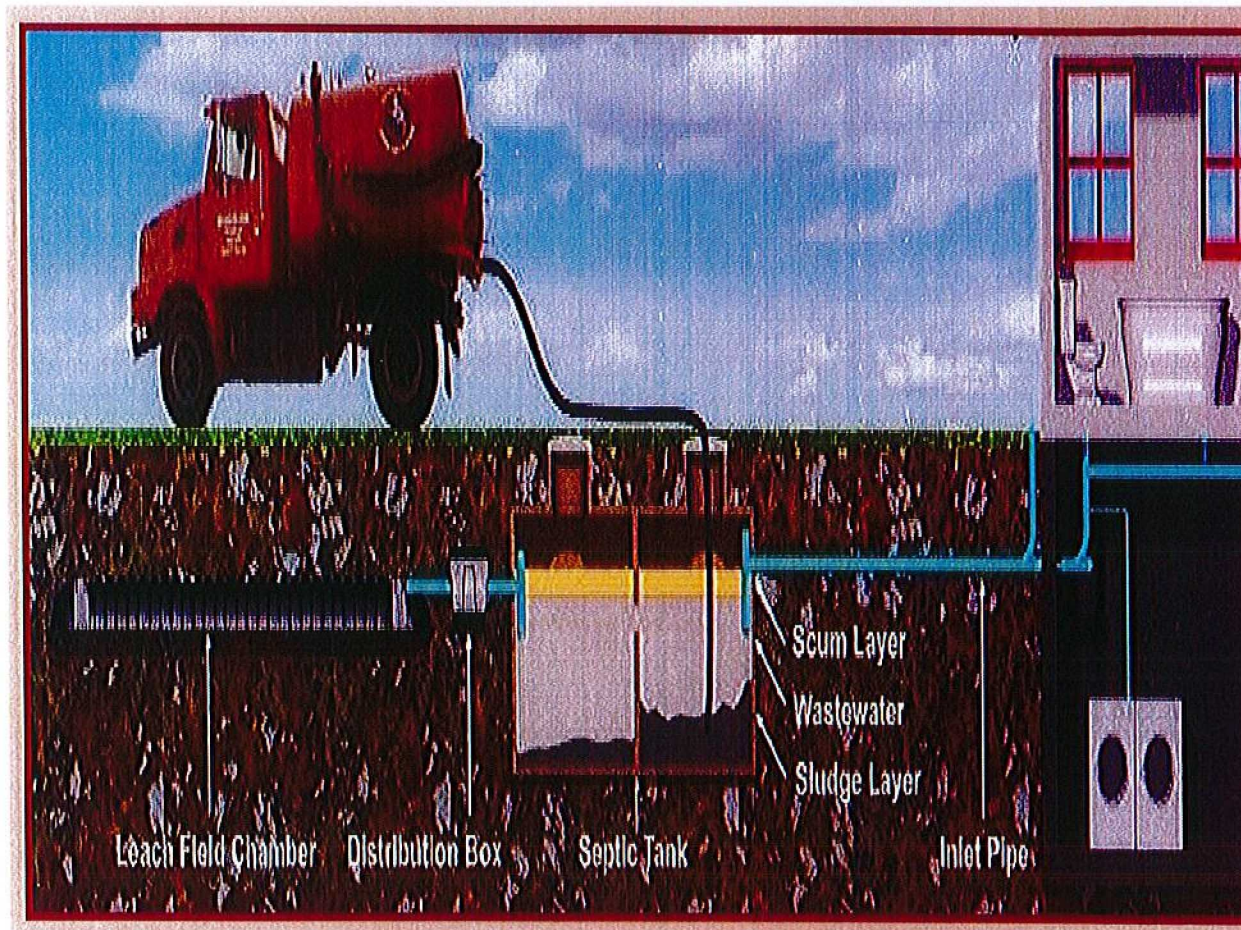


Property owners should control the amount of water used and should place only items intended for septic disposal into house drains.



**Who is responsible for on-lot
septic system maintenance?**

Property owners are responsible for the maintenance of their septic systems.



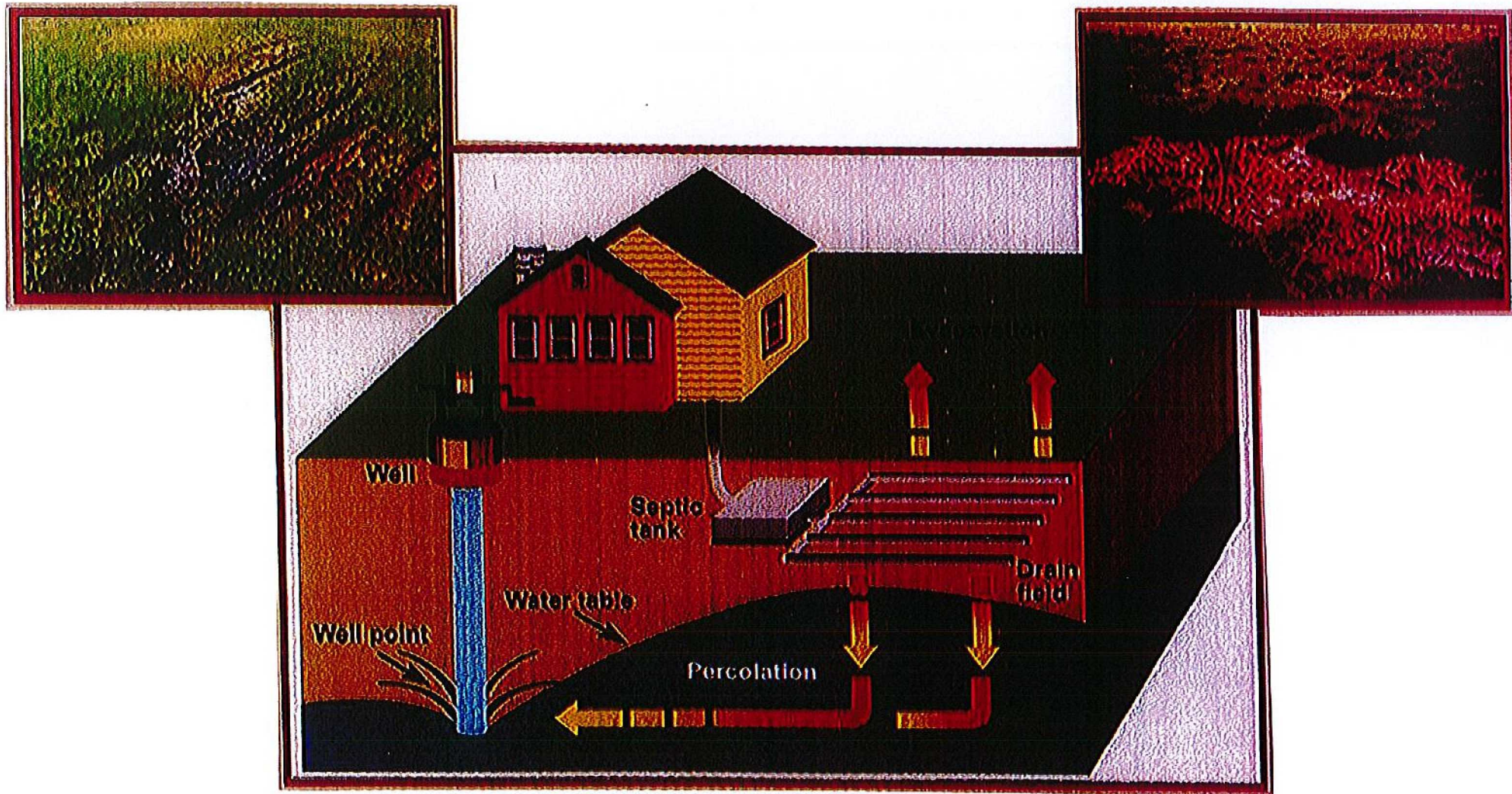
**Who maintains on-lot
septic systems?**

Property owners should have their septic tank pumped out at least once every 4 years by a qualified septic service provider.



**What will happen if on-lot
septic systems are not properly
operated and maintained?**

The system may fail contaminating groundwater and water supply wells, creating health hazards.



**What will happen if an on-lot
septic system fails?**

System failures require immediate action that may require costly septic system replacements.



**For more information on septic system operation
and maintenance, you may contact:**

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York, PA 17402**

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Email:yorkccd@yorkccd.org

website:www.yorkccd.org