PICKAWAY COUNTY PUBLIC HEALTH
We Care.

Pickaway County Public Health (PCPH) does not endorse any manufacturer of sewage treatment system (STS) or components. Models, Manufacturers, and Products will vary. Please consult with a registered service provider on information relating to your STS.

How It Works: Leach lines

Leach lines, also known as trench lines, are typically installed on lots that have ideal soil conditions and minimal constraints. Leach line STS is a soil absorption system that is gravity fed or can be installed with a pump tank to discharge sewage effluent to the leach lines.

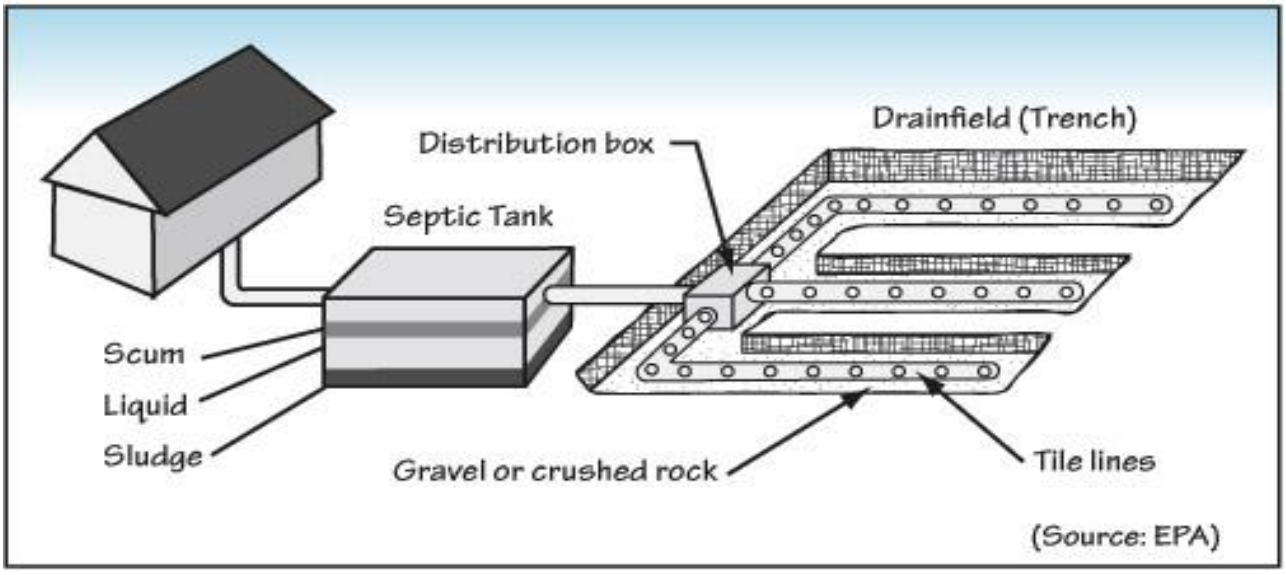
Components:

Tank(s)- A leach line STS uses a septic tank for the first step of sewage treatment. Solids settle at the bottom of the first tank and the sewage effluent and scum on top will flow to the second compartment/ second tank. **View our tank factsheet to learn more*

Pump tank- If the STS cannot be gravity fed to the trench lines, a pump tank may be installed after the septic tank(s) to pump the sewage effluent up to the distribution box/ dropdown box.

Distribution box/ Dropdown boxes- helps distributes the sewage effluent evenly into the leach lines

Leach lines- Sewage effluent is gravity fed into the trench line and percolates into the soil for final treatment. They are made of either gravel & perforated PVC pipe, EZ Flow, or Infiltrator Chambers.



Types of Leach Line Media

Leach lines are installed by using gravel & perforated PVC pipe (gravel & pipe), EZ Flow, or Infiltrator Chambers. All three (3) medias are approved for STS install and distribute sewage effluent evenly throughout the entire length of the leach line. The difference is today's advancements in STS technology; Unlike gravel & pipe, EZ Flow and Infiltrator Chambers are approved to be utilized as a non-gravel fines-free distribution system, meaning these medias do not need a layer of gravel to be added for the install.

Instead of using the classic PVC pipe, Infiltrator Chambers are made of flexible recycled plastic and EZ Flow is made of Poly-Rock aggerate with geotextile mesh.

Gravel & Perforated PVC Pipe

EZ Flow

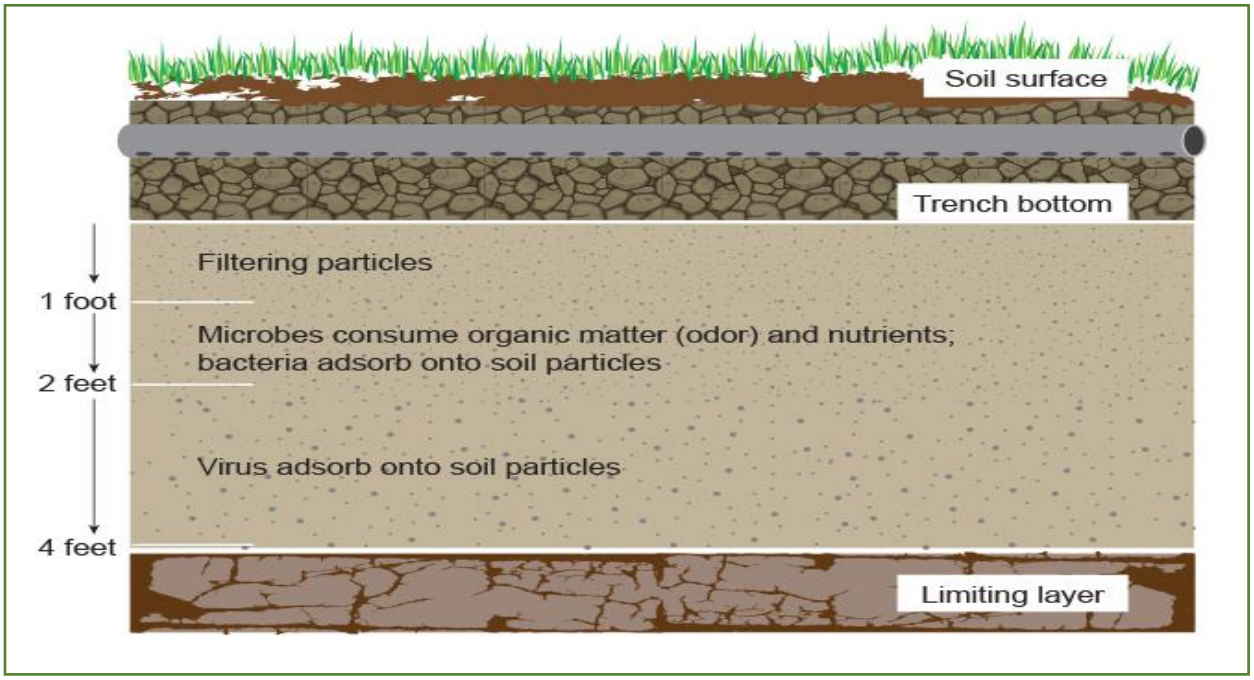
Infiltrator Chambers

How does sewage effluent get treated through the soil?

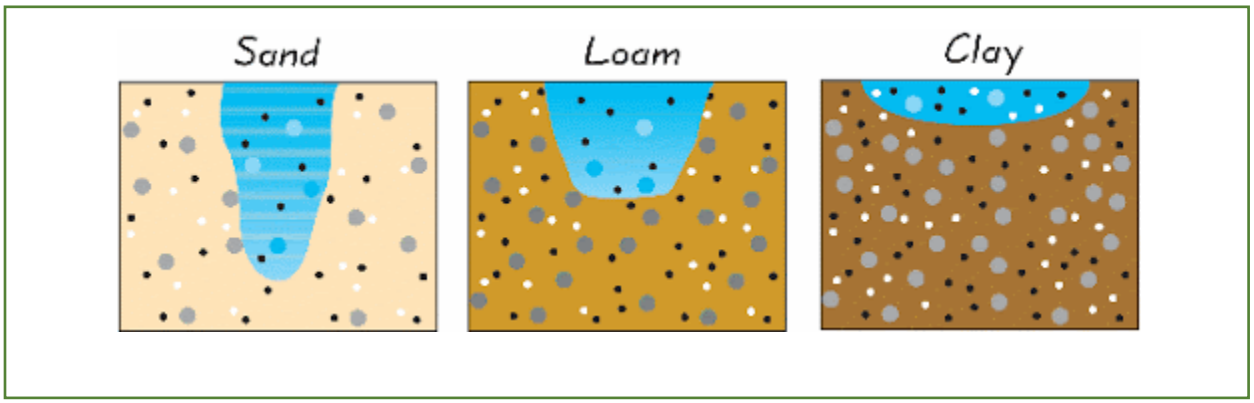
A soil absorption STS uses soil as final treatment of the sewage effluent.

The tank(s) help filter out the solids, what is left is the sewage effluent. The sewage effluent is treated through natural biological activity found in the soil and the physical characteristics of the soil.

Sewage effluent is a buffet of organic matter that bacteria, nematodes, and other small organisms found in the soil love to chow on to break down and absorb the sewage effluent as nutrients. The sewage effluent will then percolate, or filter through the soil naturally treated.



How fast the sewage effluent can filter through the soil depends on the percentage of clay, sand, and silt (loam) there is present in the soil. If the soil has more clay, it will take longer for the effluent to filter through the soil. If the soil has more sand, it will be faster for the effluent to filter through the soil.



Homeowner O&M Requirements

- Maintain the O/M permit through PCHD (every 3 years).
- Retain all records of your STS in a file.
- Do not flush anything down the drains that is harmful to the system. ***View the EPA SepticSmart document on website to learn more.*
- Keep the tank lid(s) exposed for easy access into the tank(s).
- Ensure the tanks are pumped when needed. It is recommended to have the tanks pumped by a registered septage hauler every 3 to 5 years.
- Look for cracked or broken tank lids and distribution boxes/ dropdown boxes. Contact a registered service provider to replace any damaged lids or components.
- If you have a pump tank and the alarm is on and/or sewage effluent is ponding around the lid, contact a registered service provider for repair.
- Clean the effluent filter every 6 months. **Review our tank factsheet for step-by-step instructions.*
- If you have a distribution box, switch the elbow every 6 months or if you have dropdown boxes, rest a trench line every 6 months.
- Do not plant any trees or build any structures over the distribution area.
- Walk the distribution area (leach lines). Check for any wet patches, bleeding or ponding of sewage effluent/sewage odor. If you observe any of the following, please contact a registered septic installer.