

## Traditional Sewage Treatment Systems (STS)

Most houses in Pickaway County have a sewage treatment system (STS). A traditional STS is a system that has been installed and in use for several years. Some of the existing systems that are older have technology that is outdated or prohibited.

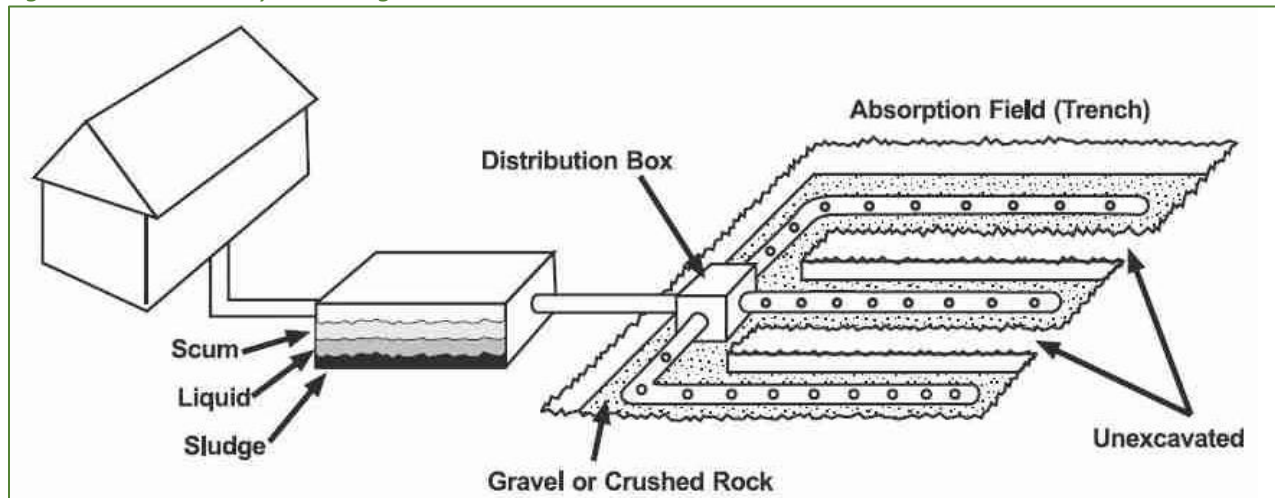
If you are buying or selling a house with a STS, or just curious what type of STS is installed on your property, visit our website ([www.pickawaycountypublichealth.org](http://www.pickawaycountypublichealth.org)) to search our septic record database or contact Pickaway County Public Health (PCPH) for a records request.

Below is a list of traditional STS's that are commonly seen in Pickaway County:

### Types of Existing STS:

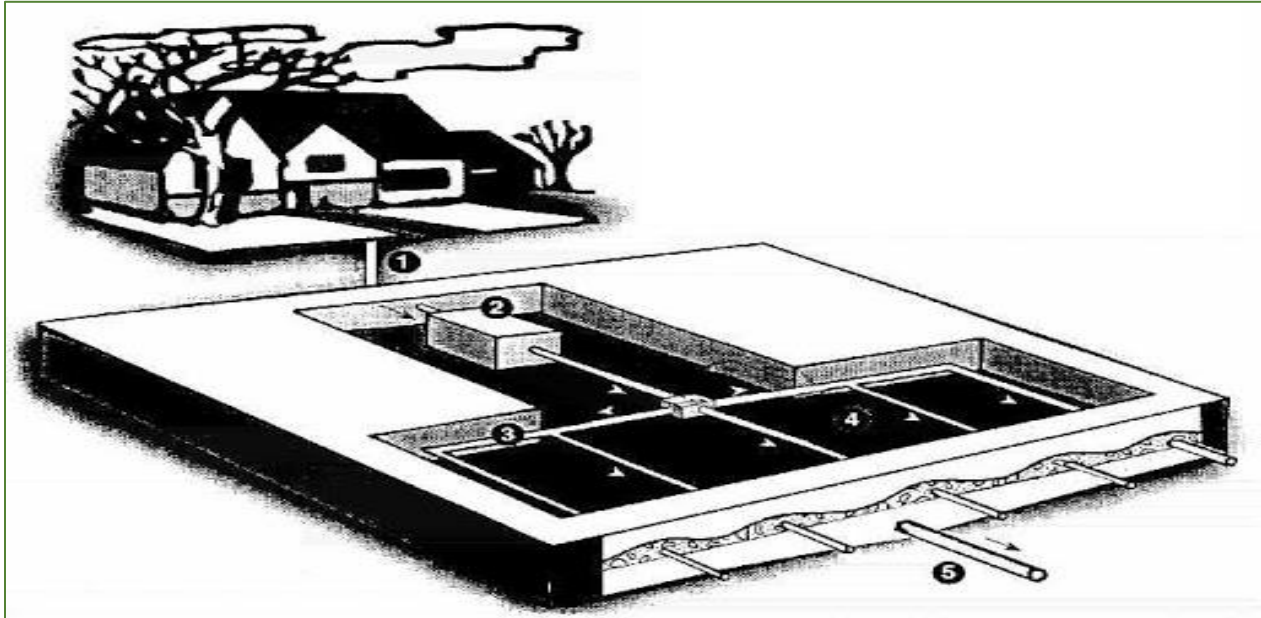
**Leach Lines**- A soil absorption system that is composed of a septic tank(s), distribution box, and leach lines. The leach lines are made of perforated pipe and gravel. This system can be designed to be gravity fed or pressurized to discharge sewage effluent to the leach lines. *\*\*View our Leach Line STS Factsheet for more information.*

Figure 1: Leach Line System Diagram



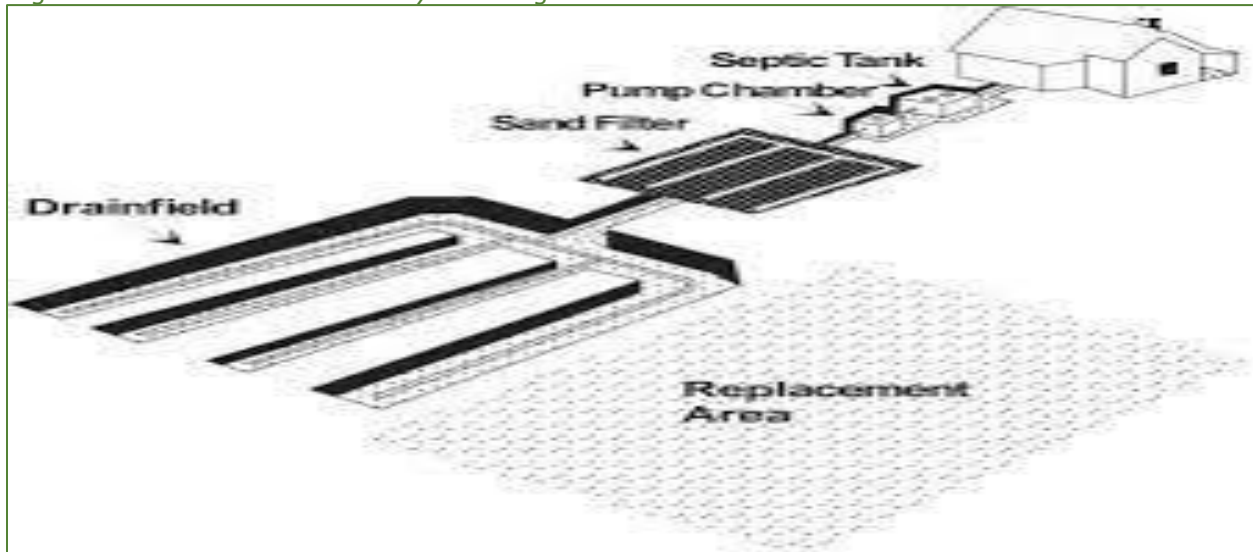
**Filter bed**- A discharging system that is composed of a septic tank(s), distribution box, filter bed, and a discharge pipe. The filter bed, also known as a leach bed, is composed of perforated pipe laterals, layers of gravel-sand-gravel, and another perforated pipe lateral at the bottom layer of gravel. Sewage effluent flows into the distribution box which is eventually distributed into the laterals. The sewage effluent filters through the gravel and sand layers as a way of natural treatment of wastewater. After the sewage effluent filters through the gravel and sand layers, it collects at the bottom lateral and then discharges to a ditch or a stream.

Figure 2: Filter Bed System Diagram



**Filter bed to Leach Lines**- Very common existing STS; Instead of the filter bed discharging to a ditch or stream, it discharges into leach lines.

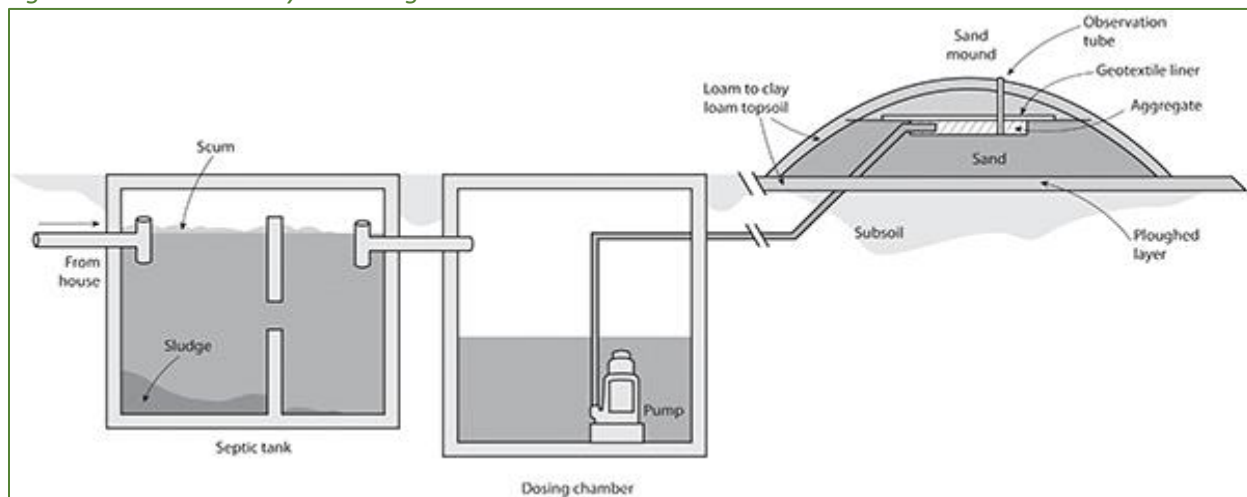
Figure 3: Filter Bed to Leach Line System Diagram



**Leach lines to Filter bed (overflow)**- This STS was designed with the filter bed installed after the leach lines. These STS were installed in areas with a lot of clay in the soil, which caused a lot of water ponding issues. The idea for these systems is when there is a rain event, the filter bed will take the sewage effluent that overflowed from the leach lines and discharge that sewage effluent into a nearby ditch or stream.

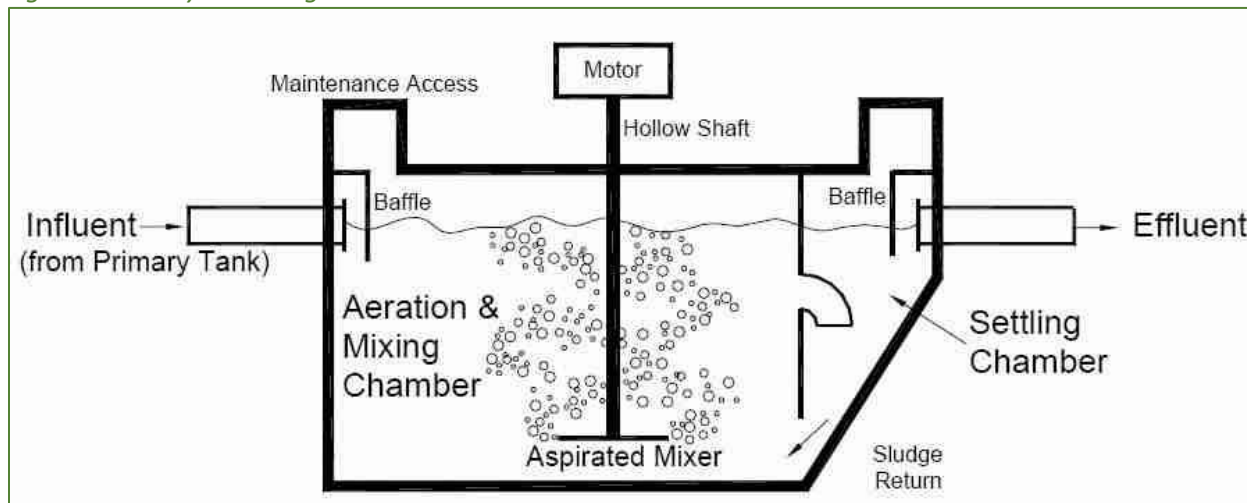
**Sand Mound**- A pressurized soil absorption system that is composed of a septic tank(s), pump tank, and sand mound. *\*\*View our Sand Mound STS Factsheet for more information.*

Figure 4: Sand Mound System Diagram



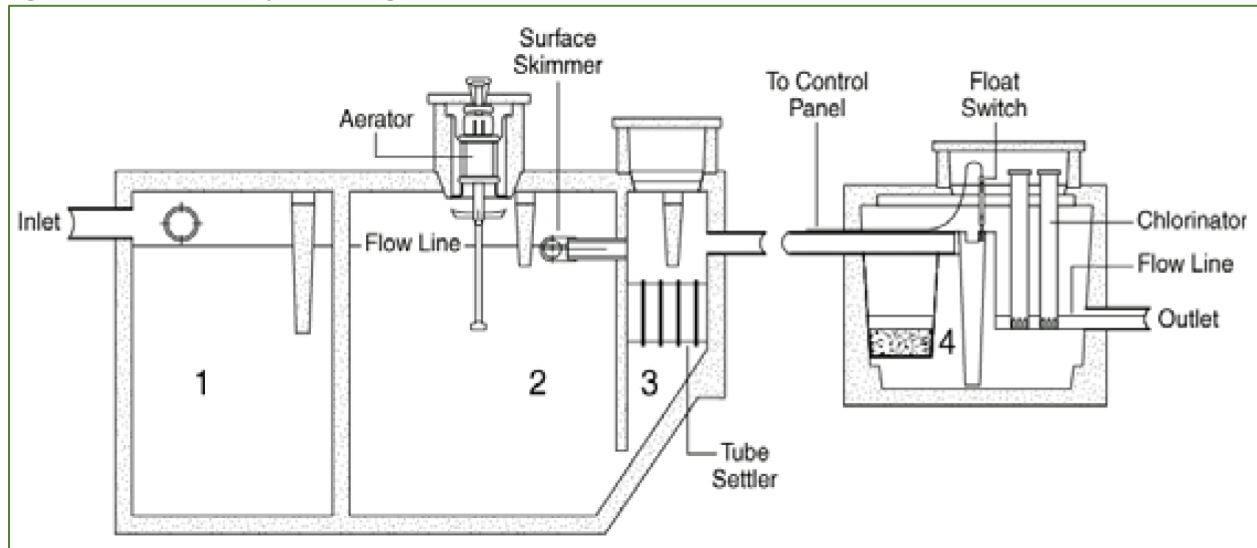
**Aeration Treatment Unit (ATU)**- A discharging system that is composed of an aeration tank, pump tank, and a discharge pipe. The aeration tank is similar to a septic tank except it has a motor to pump oxygen into the tank to help break down scum/solids through aerobic digestion *\*\*\*View our tank factsheet to learn more about ATU.* After the scum/solids are broken down, the sewage effluent goes into the pump tank where it will be discharged to a ditch or stream.

Figure 5: ATU System Diagram



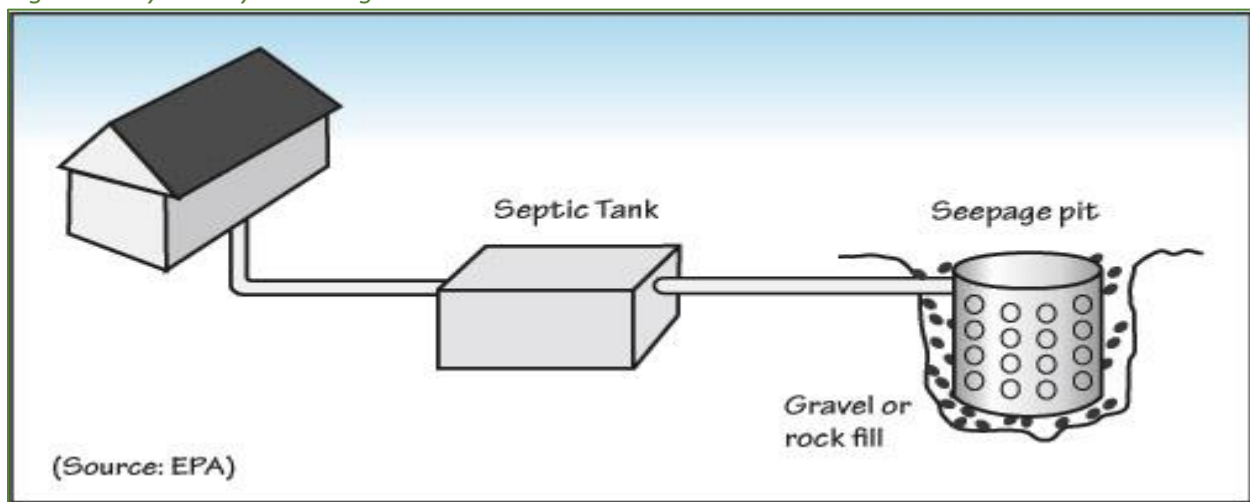
ATUs that were installed between 1986-2006 are called **Class 1 Aeration Systems**. These systems have a disinfection unit (chlorine and dechlorine tablets) to further disinfect/treat the sewage effluent before discharging to the ditch or stream. There are different models and manufacturers of Class 1 Aeration Systems, and some have been designed using telemetry or an alarm system. If your system is a Class 1 Aeration system, you must have a valid service contract every year.

Figure 6: Class I ATU System Diagram



**Dry well-** Also known as leach well, is a soil absorption system typically found in areas with sandy soils. The leach well is a round septic tank filled with gravel with holes around the sides. The STS is composed of a septic tank(s) and a leach well(s). The sewage effluent flows from the septic tank(s) into the leach well(s). The sewage effluent seeps through the holes and filters through the soil as natural treatment of wastewater.

Figure 7: Dry Well System Diagram



**Chemical Tank-** A discharging system that is composed of a septic tank with a basket set inside of the tank that holds chlorine tablets and a discharge pipe. The sewage effluent will flow through the septic tank skimmer and across the chlorine tablets to be disinfected/treated and out the discharge pipe by gravity to a ditch or stream.

## **Commonly Asked Questions:**

### **How do I know if I have a sewage treatment system?**

If you are not paying a sewer bill, you have a sewage treatment system.

### **How do I know what type of STS I have?**

Contact our office at 740-477-9667 ext: 370 for a records request of the septic permit at no charge.

### **I can't find my septic tank, what do I do?**

Contact our office at 740-477-9667 ext: 370 for a records request of the system diagram. If one exists, a copy can be provided at no charge. After locating your septic tanks, contact a registered service provider to install risers to make servicing your system easier.

### **What happens if my system is causing a public health nuisance or is prohibited?**

If the system was not inspected through a Point-of-Sale, nuisance complaint, or other illicit discharge enforcement activities, it is recommended to contact our wastewater staff and fill out a voluntary site review application to begin the process of STS replacement.

### **Homeowner O&M Requirements**

- Maintain the O/M permit through PCPH every 3 years, apart from mechanical systems which are every year.
- If you have an ATU that is a Class 1 Aeration System, ensure you have a valid service contract with a registered service provider.
- 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. 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.
- If you have an ATU and you do not hear the motor running and/or the alarm on the control panel is flashing, making audible noise, contact a registered service provider for repair.
- If you have a distribution box, switch the elbow every 6 months.
- Do not plant any bushes/trees or deep-rooted landscape in distribution area.
- Do not build any structures (pools, sheds, garages, decks, etc.) on the STS.
- Walk the distribution area. Check for any wet patches, bleeding/ponding of sewage effluent, & sewage odor. If you observe any of the following, please contact a registered septic installer.