



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: Spray Irrigation System

Spray Irrigation sewage treatment systems can be useful in situations when soil conditions are not optimal for conventional STS, or the lot has irregular contour lines.

Components:

A spray irrigation system consists of an Aeration Treatment Unit (ATU), Disinfection unit, Pump tank, and spray head(s)

ATU- 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 ATU tank factsheet to learn more about ATU*

Disinfection Unit- This uses ultraviolet (UV) light to disinfect/treat the sewage effluent that passes into the pump tank.

Pump Tank- This holds the treated sewage effluent until it discharges to the spray head(s). The pump tank is timed does timed dosed, meaning it is set to a timer to discharge sewage effluent to the spray head(s) in the early morning of the day (4:00AM), or a time with a low risk of activity (ex: kids playing outside, outdoor party events). **View our ATU tank factsheet to learn more*

Spray Head(s)- Spray the treated sewage effluent into a designated zone to receive additional treatment through soil absorption. Typically, there is one (1) spray head that sprays 360° or two (2) spray heads that spray 180° in opposite directions.

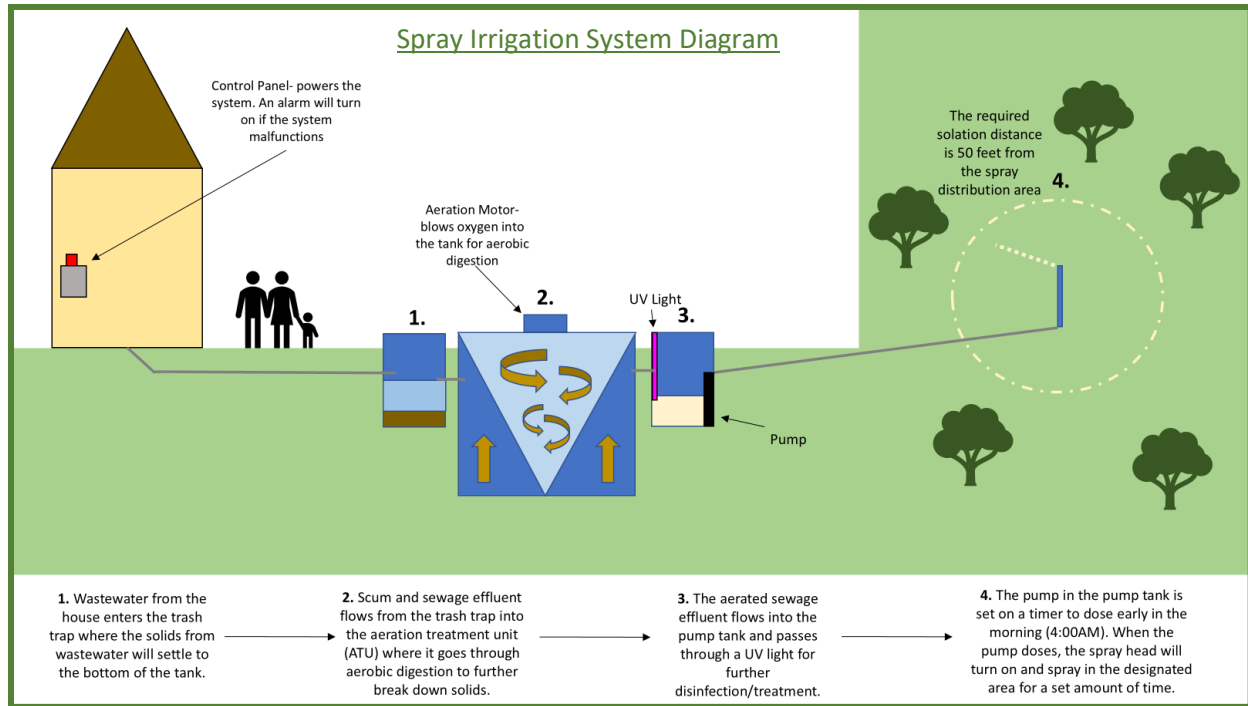
Just like the NPDES, it is a mechanical system (it uses electricity for the motor, UV light, and pump). All the electrical wiring, fuses, and switches for the system are in the control panel. The control panel is equipped with an alarm. If the alarm is flashing and/or making an audible noise, a component is malfunctioning, and you should call your service provider.

Since it is a mechanical system, it is also required to maintain a valid service contract with a registered service provider for the spray irrigation system.

On my Operation and Maintenance (O&M) Permit it says, “TAC Spray Irrigation System”, what does TAC approved mean?

TAC stands for Technical Advisory Committee. The committee assists the Ohio Department of Health (ODH) in the review and approval/disapproval of sewage treatment systems (STS).

TAC approved means the committee has approved the STS for use, but the STS has not been written in the Ohio Administrative Code (OAC) sewage treatment system regulations yet.



Is there a concern with spray irrigation systems freezing?

Due to the nature of the components being above ground and exposed to weather conditions, it is possible for spray irrigation systems to freeze. However, precautions are taken during the installation of the system to help prevent components of the spray irrigation from freezing. Heat tape, drain back to the pump tank, and spray heads made without mechanical gears are several strategies used during installation to prevent the system from freezing. If you are experiencing freezing issues with your system, please contact a registered service provider.



Homeowner O&M Requirements

- Homeowners with a spray irrigation system must maintain a valid:
 - O&M Permit with PCPH
 - Service contract with a registered service provider annually

The operation and maintenance of the spray irrigation system is managed through the service contract with the registered service provider. **NEVER ATTEMPT TO SERVICE THE SYSTEM.**

It is the homeowner's responsibility to:

- Maintain the service contract
- 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.*
- Have the tank(s) pump when necessary (recommend 3 to 5 years).
- Do not plant any bushes/trees or place any structures in the spray distribution area.
- Do not hide or block the spray head(s).
- Keep the tank lid(s) exposed for easy access into the tanks.
- Check for any evidence of erosion or settling of vegetative grade cover and ponding in the spray head distribution area. If any of these characteristics are observed, call a registered service provider, as the spray heads are not functioning correctly.
- Call a registered service provider when your system is malfunctioning.