



# Knox County Health Department

## Household Sewage Treatment System (HSTS)

### Operation and Maintenance Program (O&M)



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## Introduction:

In 1975 state-wide minimum sewage rules were passed for the first time in Ohio's history and were updated again in 1977. As limitations to these rules were identified additional updates were proposed but were never brought into code. This led many counties to adopt their own set of rules and regulations. This continued until 2006 when the State of Ohio passed new state-wide rules and regulations effective January 1, 2007. These rules were only in place for 6 months before the state legislature rescinded them, and brought back the 40 year old rules. After many years of committee work on January 1, 2015, the current rules and regulations were adopted and put into code. Every county in the State of Ohio has the same rules and regulations at this time.

The new sewage rules require local health departments to develop a program for the administration of maintenance requirements established under the rules. This program includes:

- Identify operation, maintenance and monitoring requirements for different system designs.
- Enforce operation permit requirements
- Find existing failing systems and ensure the property owner makes the necessary repairs.
- Identify sensitive areas where failing systems could pose an increased health risk or contribute to degraded water quality.
- Develop a set of fees for operating permits and health department inspections if proper maintenance is not being provided.
- Develop a record keeping database for operation and maintenance activities.
- Educate homeowners about the proper operation and maintenance of their systems.

The objective of Knox County's hsts O&M program is to promote healthier lifestyles, prevent illness and protect our environment. Knox County's O&M plan was developed with the input from an advisory committee of stakeholders and KCHD staff in response to these laws.

## Definitions:

**Alteration:** "Alter" or "Alteration" means the same as division (A) of section [3718.01](#) of the Ohio Revised Code. For the purposes of this chapter, the terms "alter" or "alteration" shall include, but not be limited to a change in the nature of influent waste strength; a change in system components; an expansion of the treatment or dispersal system, and may include a change in the volume of the daily design flow.

**Household Sewage Treatment System (HSTS) or (STS):** "Household sewage treatment system" or "HSTS" means any sewage treatment system, or part of such a system, that receives sewage from a single-family, two-family, or three-family dwelling. For the purposes of this chapter structures that are served by a household sewage treatment system shall also include:

(1) A dwelling and related structure, such as a barn or personal garage, when the users of the structure are only the residents of the dwelling, and provided the related structure is not used as a dwelling.

(2) A dwelling with a home business when the nature of the home business is such that it does not produce sewage.

(3) Vacation rental cabins, provided there is a separate HSTS for each cabin.

(4) A bed and breakfast, residential facility, or other residence as described in divisions (B)(2), (B)(4), and (B)(13) of section [3717.42](#) of the Revised Code.

(5) Group homes occupied by no more than sixteen unrelated individuals, including, but not limited to, a hospice and pediatric respite care facility as defined in rule [3701-19-01](#) of the Administrative Code, a foster home, group home, group home for children, Indian foster home, residential facility, children's residential center, or residential parenting facility as defined in Chapter 5101:2-1 of the Administrative Code, or a type A home as defined in rule [5101:2-13-02](#) of the Administrative Code, a residential facility defined in rule [5122-30-03](#) of the Administrative Code, or a residential facility defined in section [5123.19](#) of the Revised Code.

**Replacement STS:** "Replacement" means the installation of a new sewage treatment system to replace an existing system. For the purposes of this chapter, the replacement or relocation of a soil absorption component or the treatment component providing the majority of the treatment shall be considered a replacement. For the purposes of this chapter the addition of a treatment component to a discharging system not currently under a NPDES permit shall be considered a replacement.

**Small Flow On Site Sewage Treatment System:** Small flow on-site sewage treatment system" or "SFOSTS" means a system, other than a household sewage treatment system that treats not more than one thousand gallons of sewage per day and that does not require a national pollutant discharge elimination system permit issued under section [6111.03](#) of the Revised Code or an injection well drilling or operating permit issued under section [6111.043](#) of the Revised Code. For the purposes of this chapter, structures that are served by a small flow on-site sewage treatment system shall also include:

(1) More than one dwelling or arrangements such as a dwelling and a detached garage with living space.

(2) More than one vacation rental cabin.

(3) A dwelling and related structure, such as a barn or personal garage, when the structure is used by persons other than, or in addition to the residents of the dwelling.

(4) A dwelling with a home business when the nature of the home business is such that it produces sewage, including but not limited to, home businesses that provide a public restroom for use by nonresidents.

## Current Programs:

Knox County Health Department currently has 5 programs that contribute to its current O & M program:

- Real Estate transfer inspections
- Lot splits of parcels with existing dwellings
- Nuisance complaint investigations
- 12 month follow-up inspections on new systems
- Semi-Public, Small Flow On-Site Sewage Treatment System Inspection

## Real Estate Transfer Inspection:

Inspections are performed at the request of home sellers, buyers, or lenders to the design and condition of the STS. Most of these inspections are performed by private companies; some of which started reporting their findings in 2015.

### Lot Splits

When a lot with an existing household STS is split the sewage system is inspected and its location is determined to assure it is well within the proposed lot boundary, and that any drainage easement needed gets recorded.

### Nuisance Complaints

A complaint regarding a failing system can be received from the occupant, neighbor, township representative, or anyone that has reason to believe a system is failing.

### 12 Month Inspection

KCHD returns to all new systems 1 year after the permit is signed by the Health Commissioner to assure the system is working correctly and to verify the design has not been changed or altered due to landscaping or other activities.

### Semi-Public or Small Flow On-Site Treatment Systems

KCHD returns on a yearly basis to inspect group homes, churches, and other semi-public locations that treat less than 1,000 gallons per day.

## O&M Implementation Schedule:

**Phase 1:** All new, alteration, and replacement sewage treatment system permits are entered into the O & M program (approximately 100-130 per year) and all existing known National Pollutant Discharging Elimination Systems STS (currently have 0). A master list of known sewage treatment systems will be manufactured and maintained by the Health Department. This list will be made available to any service provider upon request. The list will be continually updated as more information is received.

**Phase 2:** All known Small Flow STS and Aeration Units shall be entered into the O & M Program.

**Phase 3:** All valid sewage nuisance complaints are entered into the O & M program. And, all STS that currently provide O&M reports or other STS inspection reports. This will include any real estate transfer inspections of an STS that have been received.

**Phase 4:** Inspect hamlets to identify public health nuisance areas related to household sewage treatment systems and collaborate with the Knox County Commissioners at pursuing municipal sanitary sewerage where necessary and feasible.

**Phase 5:** Establish areas that may have an increased risk for public health hazards due to septic effluent runoff. This will include any residence that drains to a creek, stream, river, pond, or lake.

**Phase 6:** Inspect each township in alphabetical order by township and then by road name. Realizing this will take longer than 1 year to complete, anticipate a minimum of 5 per week.

## Operation Permits:

All HSTS which have components or devices that include, but are not limited to providing pretreatment of effluent, improving dispersal of effluent to the soil absorption component, adding capacity to the soil absorption component, replacing the soil absorption component or otherwise reducing public health nuisance conditions or system failure will be issued a permit to operate for

All new or replacement systems will be issued a permit to operate for 10 years. At the end of that 10 year period a new operation permit will be required. The permit fee will be set at a reasonable level to cover the costs of managing the O&M program. Any system that is found to be unsatisfactory and requires a repair or replacement of the system will then be required to purchase an operation permit. Operational permits will continue to be issued upon final approval of new or altered systems.

## Inspections and Service Contracts:

The compliance inspection or O&M service frequency shall meet the timelines laid out in this document for each HSTS in Knox County. Systems utilizing an Aeration Treatment Unit (ATU) or "aerator" that discharges to a creek, roadside ditch, or another type of drainage way creating the possibility of untreated sewage contaminating our waterways will need inspected annually. Systems utilizing a

traditional septic tank, and mounds, will be inspected once every ten years. Homeowners have the option of obtaining a service contract through a service provider that is registered with KCHD or having their system inspected by KCHD. These homeowners will still be required to obtain an operation permit from KCHD within the timeframes contained in this document. Homeowners choosing this option will be required to provide proof of a valid service contract at the time of their operational permit renewal date. If a homeowner decides to cancel their service contract during the operational period of the permit they must contact KCHD inform KCHD of their plans. They can either have KCHD inspect their system or provide us with documentation that they have entered into another service contract with a different service provider. A homeowner may also act as their own service provider by being certified for O&M service by the manufacturer or their treatment unit.

## Service Providers:

Any individual or company that plans to perform inspections as a service provider, including anyone conducting Transfer Inspections, in Knox County, must register with KCHD and meet the requirements established in the Ohio Administrative Code Chapter 3701-29.

All records and information regarding a systems O&M shall be provided to the board of health within 30 days of any operation and maintenance inspection. If a registered service provider fails to properly submit their inspection reports, their status as a service provider will be brought in front of the Knox County Board of Health. Additionally, registered service providers must notify the Knox County Health Department within 30 days when a homeowner cancels their service contract.

KCHD will conduct an annual quality assurance inspection on all service providers registered with the department. This will allow KCHD to determine that the inspections are being adequately performed and also meet the terms of their registration.

## Enforcement:

The Ohio Revised and Administrative Codes provide a variety of enforcement tools to encourage compliance with the sewage rules and O&M requirements. (ORC 3718.10 and 3718.99)

Unpaid Operating Permit and Inspection fees may be assessed to the property taxes if the property owner fails to pay in a timely manner. (ORC 3709.091 and 319.281).



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**Knox County Health Department  
Operation and Maintenance Inspection Sheet**

Name \_\_\_\_\_ Phone Number \_\_\_\_\_

Mailing Address \_\_\_\_\_

Property Address \_\_\_\_\_

Township \_\_\_\_\_

Permit Number \_\_\_\_\_

Date of Inspection \_\_\_\_\_

Inspection Company \_\_\_\_\_ Phone Number \_\_\_\_\_

Type of System \_\_\_\_\_ Tank Size \_\_\_\_\_

Please Circle or Fill In

**Tanks:**

Risers and Lids to Grade: Y/N Watertight/Structurally Sound: Y/N Baffle/Tee Present: Y/N

**Distribution Boxes:**

Distribution Box Present: Yes/ No/ Inconclusive Elbow Present: Y/N Risers/Lids to Grade: Y/N

**Leaching System:**

Type of Leaching System: \_\_\_\_\_ Evidence of Failure: Yes/ No/ Inconclusive

Effluent To: \_\_\_\_\_ (Soil Absorption, Off-Lot, On-Lot Daylight)

**Mechanical:**

Are Mechanical Parts Functioning Correctly At Time Of Inspection: Yes/ No/ Inconclusive

Are Any Of The Mechanical Parts Aftermarket?: Yes/ No/ Inconclusive

Is This System Creating A Public Health Nuisance: Yes/ No/ Inconclusive

Dye Found: Yes/ No/ Inconclusive

Date: \_\_\_\_\_

Signature: \_\_\_\_\_

Inspector





