

DO

- DO inspect your septic system every 2 years if it has a pump and every 4 years without.
- DO pump out septic tank every four years max.
- DO keep records of pumping, inspections and other maintenance.
- DO repair leaking faucets and toilets.
- DO conserve water to reduce wastewater.
- DO divert roof drains and surface water away from the soil treatment area.
- DO call a professional when you have questions.

DON'T

- DON'T drive or park over any part of your septic system.
- DON'T use commercial septic tank additives.
- DON'T dig or build on top of your septic system.
- DON'T plant anything over the soil treatment area (non-irrigated, native grasses are ok)
- DON'T flush non-biodegradable items into your system, such as diapers, tampons, etc.
- DON'T dump harmful chemicals down the drain.

USE PERMITS

A Use Permit from TCHD is required to be obtained by the property owner under the following circumstances:

- The sale of a property as defined in TCHD's current OWTS Regulation.
- A remodel that includes the addition of up to two bedrooms.
- A change in the use of the property from residential to commercial.
- Connection of a modular unit or mobile home to the system.
- Other conditions that TCHD may deem appropriate.

For more information on the Use Permit process:

Call your local TCHD office or go to [http://www.tchd.org/740/Use -Permits](http://www.tchd.org/740/Use-Permits)

To obtain a list of licensed professionals visit our websites:

Septic Engineers:	http://www.tchd.org/DocumentCenter/View/466
Licensed Septic Installers:	http://www.tchd.org/DocumentCenter/View/467
Licensed Septic Cleaners / Pumpers:	http://www.tchd.org/DocumentCenter/View/465
Septic Higher Level Treatment Inspectors:	http://www.tchd.org/DocumentCenter/View/6222
Certified Use Permit Inspectors (Search):	http://www.nawt.org/search.html
How to Hire a Septic Professional	http://www.tchd.org/DocumentCenter/View/1953

If you have any questions or problems, our environmental health specialists are always available to help you. We have four Environmental Health offices located in Adams, Arapahoe and Douglas Counties. Hours are from 8 a.m. to 5 p.m. and closed for lunch from 12 p.m. to 1 p.m., Monday-Friday.

Tri-County Health Department Offices

Aurora

15400 E. 14th Pl., Suite 115
Aurora, CO 80011
(303) 363-3055

Castle Rock

410 S. Wilcox St
Castel Rock, CO 80104
(303) 846-2027

Commerce City

7190 Colorado Blvd., Ste 200
Commerce City, CO 80022
(303) 288-6816

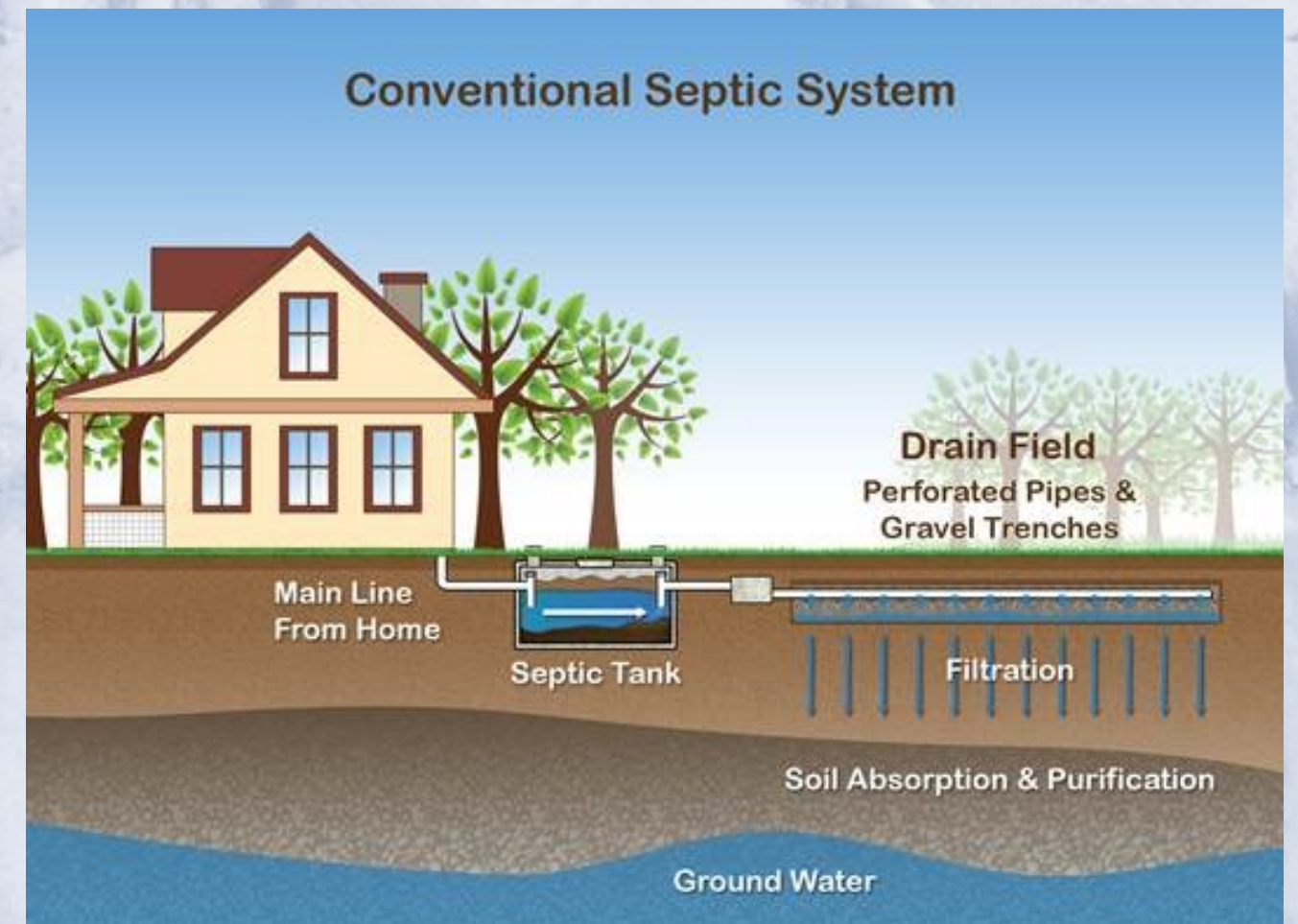
Greenwood Village

6162 S. Willow Dr., Suite 100
Greenwood Village, CO 80111
(720) 200-1670

TCHD: S-218 (1/2021)



On-Site Wastewater Treatment System Homeowner Guidelines



Tri-County Health Department Web Site

<http://www.tchd.org/269/Septic-Systems>

How Does an On-Site Wastewater Treatment System (OWTS) Work?

For your health, your family's health, and to protect the environment, you need to know how your OWTS works and how to maintain it.

Improper care of your system can cost you thousands of dollars in repair or replacement costs.

OWTS treat small wastewater flows, usually from individual homes. They are typically used in rural or large lot settings when centralized wastewater treatment is impractical.

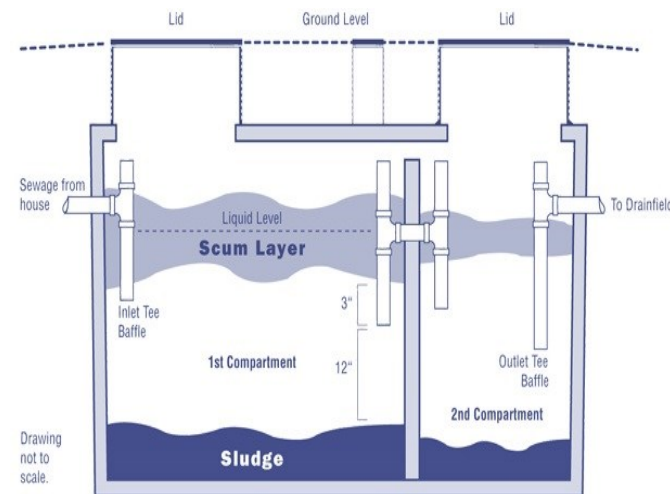
Most OWTS have two parts:

- a septic tank
- a soil treatment area

Septic Tank

The septic tank is the first stage of sewage treatment. It is a water tight container, usually made of concrete, buried underground. A typical septic tank for a three bedroom home will hold 1,000 gallons. Homes with more bedrooms will require larger septic tanks.

Your septic system treats household wastewater by temporarily holding it in the septic tank where heavy solids and lighter scum separate from the wastewater. This separation process is known as primary treatment. The solids stored in the tank are decomposed by bacteria and later removed, along with the lighter scum, by a professional septic tank pumper.



Soil Treatment Areas

The soil treatment areas below are the most common types. Numerous other types of systems can exist. For more information on your soil treatment area, contact a local Tri-County Health Department (TCHD) office.

Chambered Systems

Chambered systems utilize black dome-shaped plastic chambers which are joined together, and placed in rows. The following characterize chambered systems:

- Tank (s) and soil treatment area consisting of an excavated bed or trenches filled with chambers.
- Four inch diameter observation pipes at the end of the soil treatment area for water level monitoring (may be absent in older systems)
- Distribution box or manifold for distributing septic tank effluent to separate beds, trenches, or rows within beds.



Rock and Pipe Systems

Rock and Pipe systems are common in residential applications, and account for a substantial amount of older systems. These systems may be installed in a variety of different soil types. The following characterize rock and pipe systems:

- Tank (s) and soil treatment area consisting of an excavated bed or trenches filled with gravel.
- Four inch diameter observation pipes at the end of the soil treatment area for water level monitoring (may be absent in older systems).
- Distribution box or manifold for distributing septic tank effluent to separate beds or trenches.

NDDS

Non-Pressurized Drip Dispersal Systems (NDDS) are designed to treat septic tank effluent in soils which accept water slowly, such as clay soils. The following characterize NDDS:

- Tank (s), a pump, and large soil treatment area consisting of shallow in-ground pipe typically without gravel.
- Two inch or smaller diameter observation pipes at end of each zone used for water level monitoring.
- In-ground valve boxes with one valve controlling each zone. One valve must be shut off every six months on a rotating basis for optimal system function.
- Two inch pipe with holes at the bottom in long narrow trenches.

How to Maintain Your OWTS

1. Control the amount of water discharged into the system.

Your system is designed to handle a specific amount of water. Large volumes of water will overload the soil treatment area. To control the amount of water discharged into the system you should:

- Repair any leaking faucet or toilet immediately.
- Divert run-off water from roof eaves, drainpipes and foundation drains away from the soil treatment area..

2. Normal amounts of these household products will not harm a septic system:

- Soaps, detergents, bleaches and other cleaners will not harm the system in normal amounts.
- Wastewater from a properly functioning home water softener may cause a slight shortening of the life of the soil treatment area due to the extra volume of water. The salts from the water softener will not harm the septic tank.



3. DO NOT dispose of these items in your system:

- Household items such as facial tissues, tampons, sanitary napkins, cigarette butts, coffee grounds, egg shells, oily waste or grease from cooking, bones, paper towels, newspaper, wrapping paper, rags, and disposable diapers.
- Materials such as strong acids and photographic chemicals may upset the biological process in the septic tank.
- Latex paint, clay pottery wastewater, and similar substances remain in suspension in the septic tank, and then flow into the soil treatment area and clog the pores of the soil.

NOTE: *There are many chemical products for sale which claim to improve the digestion process in the septic tank. TCHD does not endorse any of these products. With proper care and maintenance, the system should work well without added chemicals.*

4. Have your system inspected regularly.

Tri-County Health Department (TCHD) recommends that septic systems be inspected by a professional every two years if it has a pump and every four years without. TCHD maintains a list of licensed tank cleaning companies in the metro Denver area. TCHD requires that tanks be pumped every four years at a minimum. If present, valves in the valve box should be rotated. Regular inspection and maintenance of your septic system will prevent premature failure.

5. Keep your soil treatment area in good condition.

- Cut grass and weeds growing on the soil treatment area often.
- Soil treatment areas usually are installed at very shallow depths. Because of this (1) vehicles must be kept off soil treatment areas (2) buildings, corrals for livestock, fences and trenches should not be constructed on top of soil treatment areas and (3) trees and shrubbery should not be planted within or immediately adjacent to the field.
- Some septic systems have two or more soil treatment areas. These fields are connected by valves so the flow of wastewater can be alternated between fields. If you have such a system, you should switch the diverter valve every summer.

6. Do not ignore system alarms.

Audio/visual alarms may be present on your septic system. Alarms indicate malfunctions in your system and a Septic professional should be contacted immediately to diagnose the problem.

7. Know the signs of a failing septic system.

Along with regular maintenance, homeowners should know when a septic system has failed. Signs to look for include, surfacing liquid or odors in the area of the soil treatment area, sewage backups in the house, and the audio/visual alarm.

