



HOMEOWNER TRAINING GUIDE

Waterline and Septic System

The following guide provides information regarding the common waterline and septic system installed under the Tuba City office for the Navajo Nation.

Office of Environmental Health &
Engineering

Division of Sanitation Facilities Construction
Tuba City Service Unit

Created by Rachel Joaquin, July 2015

Homeowner Training: Waterline & Septic System Guide

Goals

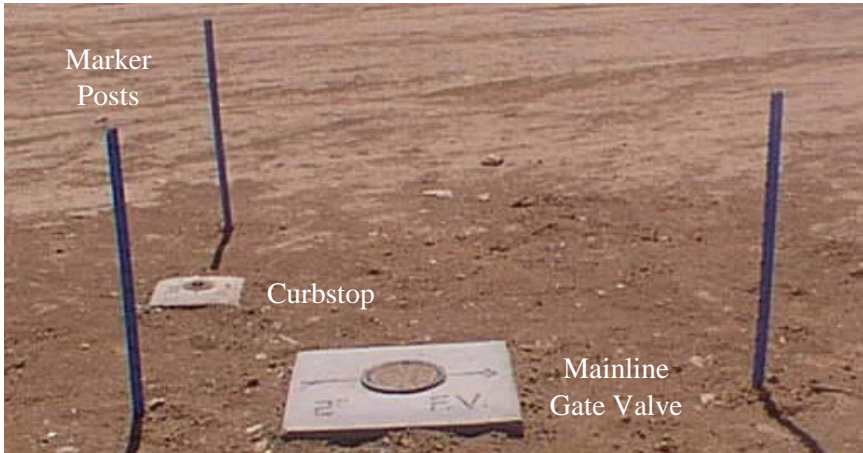
- Provide education about the new water system and septic tank/drainfield provided by the Indian Health Service
- Ensure homeowners are aware of their responsibilities and NTUA’s responsibilities
- Give homeowners the skills and knowledge to perform minor sanitation facility maintenance and repair

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Waterline Components

Blue marker posts signify the water system. NTUA is responsible for the curbstop, which is a valve that can shut off water to your line.



The meter can to the service line is NTUA's responsibility. The meter can towards your home, including the domestic stop valve, is the homeowner's responsibility.

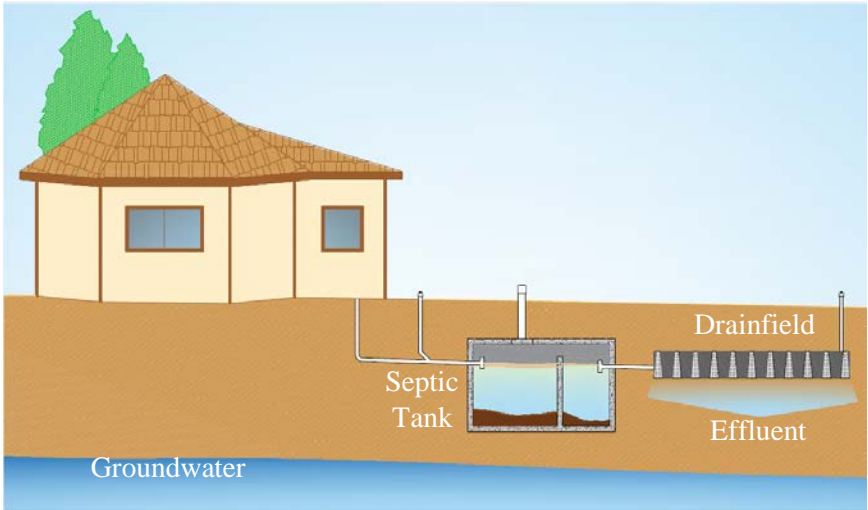


Every adult must know where the domestic stop valve is at your homesite. A $\frac{1}{4}$ turn with a wrench will turn the water on and off.

Septic Tank and Drainfield

Principles of a Septic System

The purpose of a septic system is to treat household waste via natural processes. First, waste exits the house through the sewer pipe and enters the septic tank. The first stage of treatment begins: solids settle out and grease and scum float to the top.

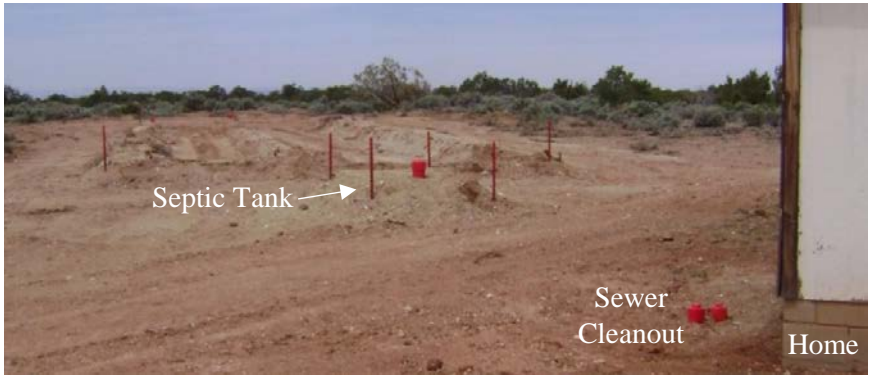


The second stage of treatment occurs when the effluent travels to the drainfield and distributes into the soil.

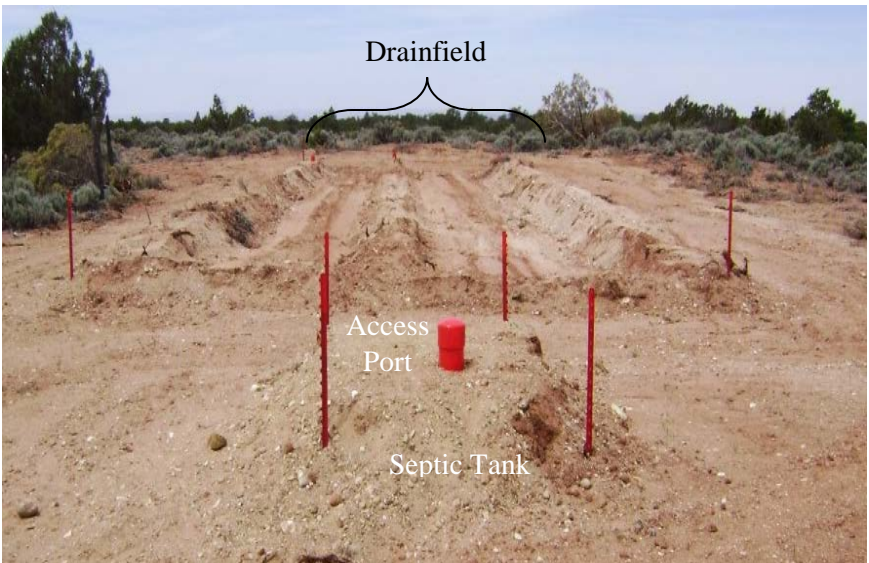
As effluent moves through the soil, bacteria, minute solids, and nutrients are removed; the liquid is safely treated before reaching the groundwater.

Red marker posts signify the sewer system.

The sewer cleanout between your house and the septic tank is where you may gain access to the sewer line. Unscrew the cap to remove sewage blockages.

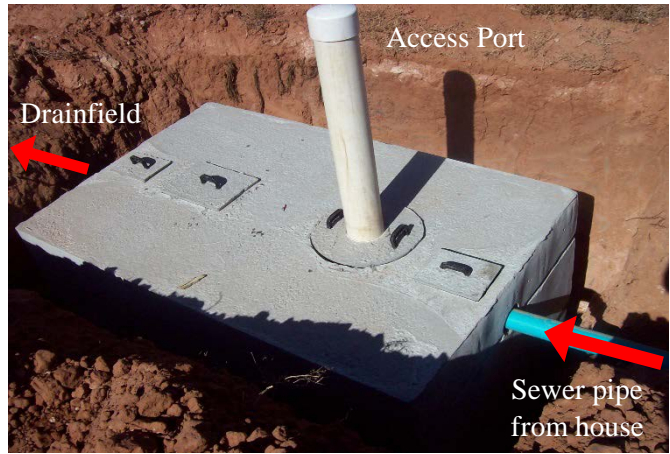


This is what your completed gravel-less drainfield will look like. There is an access port above the 1000-gallon septic tank.

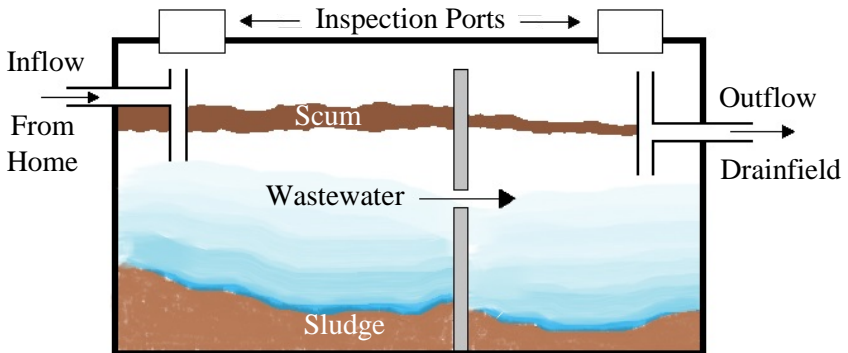


Septic System Components: Septic Tank

This is your septic tank before it is covered. There is a 4-inch pipe from your house to the tank, and from the tank to the drainfield.



The inside of your septic tank generally looks like this. The solids that settle to the bottom of the septic tank form a sludge that slowly decomposes. Fats, oils, and greases form a scum layer at the top of the tank. Between the two layers is a clear liquid that is transferred



to the drainfield or individual lagoon. The tank will always be filled with liquid. Typically, when the sludge layer is over 2 feet high, it is time to have your tank pumped.

It is the homeowner's responsibility to inspect the sludge layer every 6 months. Connect rags to a long stick or pole and insert into the inspection port to determine the amount of sludge in your tank.

Septic System Components: Drainfield

There are multiple inspection ports located in the drainfield. If there is standing water in the pipe, the drainfield is saturated, meaning the drainfield is receiving more water than the soil can accept.



The drainfield consists of sewer piping that leads to infiltrators.



The effluent from the septic tank is distributed throughout the drainfield in the infiltrators and seeps into the ground.

Maintaining Your Septic System

It is important to understand that the homeowner can prolong the life of the septic system by doing routine checks and following proper protocol. Please review these main points to ensure the longevity of your system.

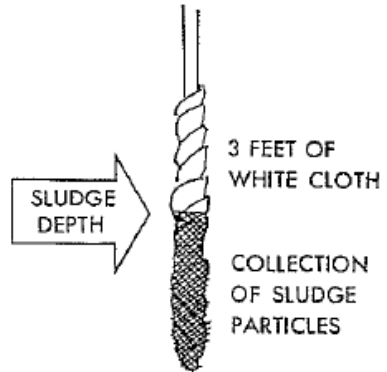
- **Inspect the sludge layer every 6 months** using a rag connected to a long stick or pole

- Note: there is always liquid filled to the top of the tank

- Depending on the amount of people in the household, the **tank must be pumped every 3-5 years**

- A list of private contractors are located in your individual folder

- **Be water-wise**; using too much water is a frequent factor in failed systems
- If you will be gone for a long amount of time, shut off your waterline (see page 2)
- Quickly repair all leaky faucets and toilets
- Use “**low-flow**” fixtures on faucets and showerheads
- **Direct water** from the land and roof drains **away from the drainfield**
- Using grass to cover the drainfield and septic tank will prevent erosion



➤ **Do not plant trees or shrubs near the drainfield**

- Roots may get into the sewer line and disturb the system



➤ **Do not flush anything except toilet paper**

- Including diapers, cigarette butts, coffee grounds, sanitary napkins, tampons, grease, oils, paper products

➤ **Do not use a garbage disposal**

- Grease and solids may clog the drainfield
- Put grease and coffee grounds in the garbage



➤ **Do not put household chemicals down the drain**

- Including floor cleaners, pesticides, paint products, antifreeze, and motor oil

➤ **Do not park vehicles on drainfield or septic tank**



- Keep grazing animals, storage sheds, and landscaping plastic off drainfield
- Do not drive over the drainfield with motor vehicles or heavy equipment

➤ **Do not use septic tank additives**

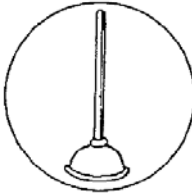
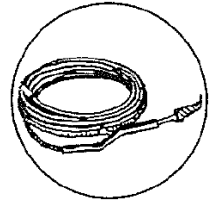
- Products may be harmful and may clog drainfield or pollute ground and surface water

Tools for Maintenance



Use an adjustable wrench for the domestic stop valve and other parts of your water and septic system.

A “snake” or an old garden hose can be used in pushing through backed-up solids in the drain.



A plunger should always be available to unclog toilets or other drains.

A piece of wire can be used to hook into and pull an object out of the drain.



References

Jeffrey Allen, P.E. OEHE Division of Sanitation Facilities Construction, Tuba City Service Unit.

Phil Coolie, Project Manager. OEHE Division of Sanitation Facilities Construction, Tuba City Service Unit.

Public Health Service. *U. S. Department of Health, Education, and Welfare.*

Additional Contact Information

The Tuba City Service Unit is located at the following address:

Tuba City Regional Health Center

Office of Environmental Health and Engineering

167 North Main Street

Phone: 928-283-2843

