

With a septic tank system, household wastes are piped to an underground tank where bacteria decompose some of the solid wastes. Wastewater flows out of the tank into an underground drainfield.

Soil has the ability to cleanse wastewater of its bacteria and viruses. If wastewater filters through enough soil, eventually it will become clean again, safe enough to drink. And that's good, because eventually, after it's made its way into the saturated zone and into an aquifer, it may end up in someone's water supply.

That's if everything works the way it's supposed to. If some of the drainfield pipes clog, wastewater is forced through the unclogged pipes, causing only a small area of the drainfield to accept the load of water intended for the entire field. When that happens, contaminated water may ooze up to the surface where it can be a health hazard to people and animals.

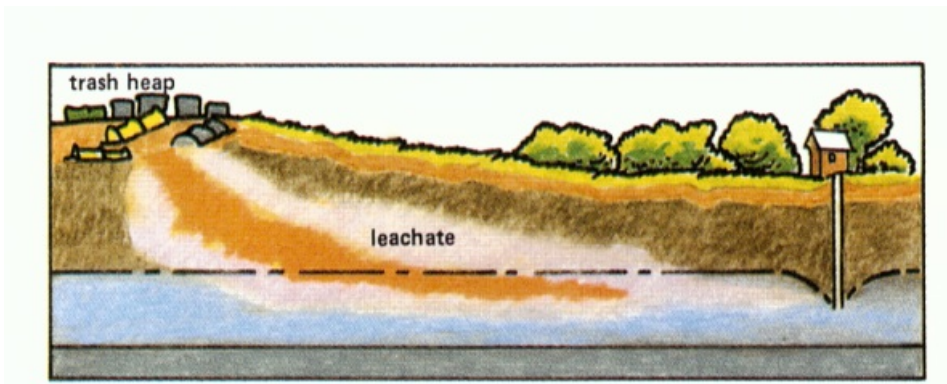
Or the drainfield might be located in ground that doesn't give the wastewater a chance to filter through enough soil to get clean. If the wastewater flows into fractured crystalline rocks, for example, it may move too quickly through the rocks to be cleansed. The unhealthy water may end up right back in the family well or in nearby streams, or it might carry its contaminants to unsuspecting users somewhere else.

Toxic materials

Sewage isn't the only problem groundwater has due to our household plumbing. Many people don't realize they may be polluting groundwater when they get rid of TOXIC MATERIALS, like paint thinner or insecticides, by pouring them down the sink or flushing them down the toilet.

"Toxic" means that a substance can be dangerous enough to make people or animals very sick or even kill them. Many toxic substances don't break down in the soil; they can travel with the water right into the saturated zone and into the aquifer, just as toxic as they were when they were poured down the drain.

Even when we don't pour them down the drain, some of these toxic household chemicals could end up in our groundwater. When we throw old bug spray containers, or varnish cans, or other toxic materials in the trash can, they get hauled off with the rest of the garbage. Ever wonder where all that trash ends up?



Leachate may travel through soil and rocks as a contamination plume.

