1. What does a typical septic system look like and how long does it last?

Septic systems in Indiana may function for 20 years or more. The Health Department's responsibility is to make sure the system is properly sited, designed, and installed; but the homeowner is responsible for the use and maintenance. If the system is not maintained, the system will fail prematurely. Click here for information regarding a typical septic system and its proper use and maintenance.

2. Does the area for the septic system really need to be protected from construction traffic before constructing my house and after installation?

The soil is the system. As such, the area for the soil absorption field must be protected before and after installation. As stated in Indiana State Department of Health Rule 410 IAC 6-8.1: "No construction on the residential sewage disposal system may take place if the residential sewage disposal system site is disturbed or altered after the on-site evaluation by the addition of fill material, (other than construction necessary for the residential sewage disposal system) or by cutting, scraping, compaction, or the removal of soil, until a new evaluation has been conducted and a modified permit has been issued."

According to the Rule, all Indiana septic systems must discharge into the soil. For soils to be suitable for a septic system absorption field, they must not be compacted or have fill. Compaction reduces the ability of a soil to disperse and treat wastewater effluent and can lead to system failure. Septic systems cannot be placed in fill due to the inability to predict permeability from the disruption of structure and the variability of the soil. The more natural and undisturbed the soil on your lot, the better your septic system is likely to perform. Do not put any structure on top of or immediately down slope of the soil absorption field. We recommend a set-aside area be established for another soil absorption field in the event of system failure or future additions to the home. A set aside area may be required depending on when your lot was platted.

For more information about compaction click the following link:

http://www.ces.purdue.edu/extmedia/AY/AY-221.html

3. What can I plant on or near the septic system?

Establishing a vegetative cover, such as native grasses, is beneficial to the proper function of your septic system and critical for mound systems. Plants with good root systems can stabilize the soil to prevent erosion, loosen the soil to allow air movement and even draw water. While trees and some shrubs can remove a significant amount of water from the area, their roots can occlude sewer lines, damage septic tanks, and invade distribution lines.

Aggressive water-loving trees such as poplar, willow and maple should be avoided near the soil absorption field. Most trees' root systems are about the same size as the leaf canopy at maturity. A good rule of thumb is to plant trees at least this far away. But even if you plant non-aggressive types,

the potential for damage to the system exists. Before planting trees or shrubs, consult with a tree nursery professional or Purdue Cooperative Extension agent. Purdue Cooperative Extension can be reached at (574) 235-9604 and is online at http://www.ag.purdue.edu/counties/stjoseph/pages/default.aspx

4. Do those septic tank additives work?

This is a much debated question. According to information from the Indiana State Department of Health and the Environmental Protection Agency:

- There are well over 1000 different septic tank additives on the market, but there is no standard for testing them.
- There is no evidence proving that a septic tank that is designed, operated, and maintained properly, needs an additive to work effectively.
- There is no product available that will allow a homeowner to escape regular pumping of the septic tank.
- Some additives may actually harm your septic tank and/or absorption field.
- There are products that can cause groundwater contamination.

For more in depth information click on the following link:

http://www.doh.wa.gov/ehp/ts/WW/Septic-Additives-SFQ-Wint2002.pdf

5. How often should my tank be pumped and what about effluent filters?

As a rule, tanks should be checked for solids buildup every year. It should be pumped every 5 years if only two people live in the home, and every other year if six people live there. Tanks should be pumped more often if you have a garbage disposal that you use heavily; garbage disposals can increase solids buildup by 50%. In practice, however, how often solids should be removed depends on the lifestyle of the family using the system and the size of the tank. If you wait until wastewater begins to back up into your home, solids have already started overflowing from the septic tank and into your absorption field. This can cause some very expensive damage to the soil absorption system.

When choosing a company to remove solids from your tank, ask if they thoroughly clean the tank and remove all solids. It is not very useful to just pump the liquids without removing the solids. To effectively clean the tank, the removed liquids should be flushed back into the tank to thoroughly agitate and remove settled solids. In addition, the baffles on the tank should be checked to make sure they are functional and the tank's effluent filter (if installed) should be cleaned. A riser extending from the tank to the ground surface installed on your septic tank makes solids removal easier and septic tank maintenance companies charge less if the tank is easy to access. If your tank has an effluent filter installed, it can be inspected and cleaned through the riser.

A properly functioning tank effluent filter protects the soil absorption field much more effectively than a baffle. If your tank does not currently have one, consider installing one the next time you have your tank cleaned.

6. What steps can I take to reduce water use in my home and around my property and why is it important?

There are many things you can do to reduce water use throughout your home without reducing your quality of life. Generally, "don't let the water run" and "fix leaky faucets." The more water and waste down-the-drain, the less time there is for settling of solids in your septic tank and the more effluent the absorption field must treat. Either of these can cause a system to fail prematurely, but together you have a recipe for failure. If your home has a septic system, you should be doing most of these even if you system is functioning normally.

Kitchen:

- Wash only full loads of dishes in the dishwasher.
- If you rinse your dishes before putting them in the dishwasher, fill your sink instead of letting the water run. You can do a quick rinse with clean water when finished.
- Fill a bowl with water to wash vegetables and do a clean-water rinse when finished.
- Fill a jug with water for the refrigerator rather than letting the water run until it is cold each time you get a glass of water.

Bathroom:

- Do not let the water run while brushing your teeth or shaving.
- Secure the tub stopper, and then take your shower. You'll be surprised to see how much water you use. Take a bath or a shorter shower.
- Install a new low flush toilet.
- Install a low output shower head, preferably with a shut-off option.
- Never install a multiple head shower.

Laundry:

- Wash only full loads of clothes.
- Replace your old washing machine with a water saving model.

Outside:

- Don't water the septic system.
- A sprinkler system should never be installed over the septic system.
- Only water the lawn around the septic system when it NEEDS it. Most of the year, a sprinkler system set on a timer will over water the lawn.
- Direct sump pump lines and downspouts away from the septic system and never connect these or other clean water drains into the home's plumbing.

7. How can I get information about my septic system?

The Health Department has records of septic permits starting in 1970. Some of the information is incomplete, but we can provide an accurate drawing or sketch for all newer systems. A completed Schematic Request must be submitted to the office, but you can call ahead with as much of the following information as possible to see if we have the record:

- Name of original applicant
- Year the home was built
- Address of home
- Subdivision and lot number

The fee for a printed record that can be copied in-house is $5.00. Records that must be retrieved from off-site storage are $10.00.

8. What signs tell me my septic system may be headed for replacement?

You may sometimes hear gurgling in your drains, see bubbling in the toilet or an occasional damp/wet spot in the yard, or after a large rain the plumbing seems slow. These are all signs that your system may be "ailing" and headed for replacement.

It is possible there may be a simpler solution such as an obstruction or your tank may need pumped. However, if the symptoms return after the tank is pumped your system is headed for failure. You won't know until it is evaluated. It will not go away by ignoring it!

If you have an "ailing" septic system that is limping along, DON'T WAIT until it is a full blown FAILURE to start the process. The symptoms will get worse! If you complete as much of this process as possible, you can plan. Remember, once the "ailing" goes to "failing," it disrupts the whole household.

9. What do I do if my system goes into failure?

If you have a septic system problem, you should immediately contact the health department and review all the information available in this Web site, including: procedures, soil scientists, registered septic installers, schematic request, etc. Reduce water usage in your home, check the septic tank for accumulation of solids and have it pumped as necessary to keep sewage from surfacing on the ground.

10. My system has worked for many years, why can't I just replace it with what I have?

Septic systems are now designed specifically for the site based upon daily design flow, soil borings and an on-site study of the property. The reason your replacement system must now have a bigger absorption field, a system with a dose tank and pump, a larger septic tank or a mound system is because that is what the soil and conditions on your property qualify for. Most likely, if the existing system has "been in use for many years," it was not designed. It was just the standard version of septic systems at the time of installation. Furthermore, due to lack of space, water wells, the addition

of fill, compaction and landscaping, soil and site conditions are different than when the property was developed.

If you have questions about system sizing or type, contact an environmental health specialist at 235-9721 for further explanation.

11. Can I put in my own septic system? I ran a backhoe once and my buddy has one he says I can use.

We recommend that you leave septic system design and installation to the professionals. The Health Department maintains a list of registered septic contractors from which you may choose.

However, if you want to pursue your own installation, please be aware of the following:

- The septic application and associated paperwork, while as straightforward as possible, will not be familiar to you and incorrect submittal of paperwork often delays permit approval.
- The Health Department cannot design the system for you. Rule 410 IAC 6-8.2, Residential Sewage Disposal Systems, and County Code 51, will be provided to you for standards of installation and design.
- You must submit plans with detail and accuracy showing how you are going to meet minimum specifications.
- A homeowner design is seldom of sufficient clarity, accuracy, and completeness to receive approval on the first submission.
- A preconstruction conference is required prior to installation of the system.
- Many times space is limited for system repair and an installation mistake could damage the site beyond use.
- You must do the work yourself.
- The Health Department will inspect your system and require corrections if it is not installed correctly.

12. How do I properly abandon my septic tank or system?

An onsite septic system or any component thereof must be properly abandoned or removed when the useful life of the system or component has been exceeded or when it is to be abandoned. The property owner is responsible for complying with the following:

- When a septic system or any component thereof must be abandoned or removed, it shall be completed in a safe and sanitary manner.
- Evidence of the proper disposal of waste materials shall be available upon request.
- Septic tanks, dose tanks and dry wells shall be abandoned according to the following requirements:
    - The power shall be disconnected at the source from all electrical controls and all controls and panels shall be removed. All electrical lines (including service lines) shall be removed that will not be used for other purposes.
    - All tanks shall be pumped and cleaned by a person licensed by the Indiana Department of Environmental Management.

    - Tanks shall be removed or the lids shall be collapsed into the tanks.
    - Dry wells and tanks to be left in place shall be completely filled with debris-free sand or other granular material, concrete or soil in a manner to prevent settling.
    - The area shall be properly graded so that water does not pond over the area and a vegetative cover shall be established.
- Absorption fields shall be abandoned according to the following requirements:
    - The components of the absorption field may be left intact.
    - If effluent has discharged to the surface, the area shall be covered with hydrated lime followed by topsoil. A vegetative cover shall be established.
    - If components of the absorption field are to be removed:
        - Sufficient time shall be allowed after the system is taken out of service and the tanks are pumped to make sure the entire absorption field is completely dry.
        - Distribution boxes must be pumped and cleaned by a person licensed by the Indiana Department of Environmental Management.
        - The distribution network, aggregate and sand (if any) shall be removed from the site and taken to a licensed landfill for proper disposal.
        - The site shall be graded so that it does not pond water and vegetative cover should be established.