

GEAUGA COUNTY BOARD OF HEALTH

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- Off-Lot
- On-Lot
- Septic Tanks
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Dear Residents:

The Geauga County Health District would like to take the time to welcome you and your family to Geauga County. Geauga County consists of a rural atmosphere and its residents are usually served by a private water well and private household sewage disposal system. This means that the individual resident is fully responsible for the monitoring and maintenance of these systems. In order to retain this rural atmosphere and protect public health, this office needs the support and cooperation from each and every resident. The information displayed on the reverse side of this sheet should provide you with important data regarding the specific layout and location of your water well and sewage disposal system. We trust this information will be of great value to you in the future. Should you have any questions please do not hesitate to call the Geauga County Health District.

Everyone must be willing to work together and assume their responsibilities to preserve the rural setting of Geauga County.

YOUR SEWAGE, WATER WELL AND PLUMBING SYSTEM: AN OWNERS MANUAL

Hopefully, this booklet will help provide you with some basic principles of how your sewage system and water well work, what you have to do to maintain them, and what to do when trouble occurs.

Please note: there are various types of sewage disposal systems installed throughout the county and not every sewage system is designed exactly the same. Generally there are two basic types of systems; ON-lot and OFF-lot. The on-lot type system distributes all the waste liquid into the soil via a network of underground trenches. An off-lot type system has filtering device(s) which treat the waste liquid and then the treated liquid waste (surface water) is discharged to the surface of the ground (road ditches, swales, streams, etc).

We hope this guide will answer most of your questions, but please remember that we're here to help. Don't hesitate to call the Health Department whenever you have doubts or questions about your septic system or water well. Work on the sewage or water system may require an alteration permit, make it a point to contact the Health Department to be sure.

GLOSSARY OF TERMS

Some technical terms to help you understand this booklet:

AERATION UNIT (NSF 40 CLASS 1) -- is a unit that contains mechanical motors and pumps which inject air into the sewage to oxidize the waste and begin biological digestion of the sewage effluent before it is discharged. These units must have the Ohio Department of Health approval before being installed.

BLACK WATER -- means waste water from toilets

LINEAR FOOT -- means one foot in length

OFF-LOT -- means the sewage is treated through the means of a filtering device(s) then discharged out onto the surface of the ground.

ON-LOT -- means the sewage disposal system that is constructed completely within the confines of a residential property.

GRAY WATER -- means waste water from showers, bathtubs, sinks, laundry tubs, dishwater, and washing machines.

LEACH TRENCH -- is a channel dug into the ground which is filled with an approved clean gravel and has a pipe in which the sewage effluent is distributed. A **LEACHING TRENCH SYSTEM** is a network of channels filled with gravel and piping where the sewage effluent is channeled for final dispersion into the soil.
(This is an On-Lot System)

PRIMARY/SECONDARY TREATMENT -- means the place where the sewage enters a storage compartment and begins the first stage of bacterial decomposition; generally, this means the septic tanks. Secondary treatment means the final process that the sewage effluent goes through in order to be considered safe enough to meet surface water standards. An aeration unit can be considered a complete primary and secondary treatment component.

SEWAGE EFFLUENT -- combination of gray and black water.

SUBSURFACE SAND FILTER -- is an underground filtering device that is made up of sand and gravel layers which allows the sewage effluent to pass downward through the material and receive final treatment before it is discharged out onto the surface of the ground. Sometimes a subsurface sand filter is referred to as a filter bed.

SURFACE WATER -- water generated by nature, including that from gutters, footer drains, and floor drains (provided no gray water goes into them).

SEWAGE SYSTEM TYPES -- Off-lot: NSF 40 Class 1 Home Aeration Units, Subsurface Sand Filters (filter beds). On-lot: Leaching trenches, P.E. Design Above Ground Leaching Trench Systems. Please note: The previously mentioned items are only portions of a sewage disposal system and not a complete system in itself.

QUESTIONS REGARDING YOUR SEWAGE SYSTEM

1. **WHAT IS A LEACHING TRENCH?** A leaching trench that is dug below the surface of the ground, with the top of the trench about 4 to 6 inches below the ground. Generally, a leaching trench is 18 inches wide and 18 inches deep. The trench is filled with gravel, and contains a perforated pipe. The leaching trench lines are considered as the secondary treatment section where the further decomposition of the sewage effluent takes place. Partially treated sewage effluent is directed into these trenches and permeates the sidewalls (soil) of the trench. As the effluent passes through the soil, the unacceptable products are filtered out and broken down biologically. The liquid by-product should be the quality of surface water.

The contour of the ground and the soil conditions along with the number of bedrooms in the house determines the total amount of leach trench footage needed and number of leaching trenches.

2. **IS THERE A STANDARD LENGTH FOR EACH LEACHING TRENCH?**

No, but we recommend that the minimum length of 25 feet and the maximum allowable length is 150 feet.

3. **WHAT IS A DISTRIBUTION BOX (D-BOX)?** It is a specially designed plastic or concrete box that controls the flow of sewage effluent going into any one leaching trench before allowing it to flow to the next trench. A D-box must have a lid and contain an elbow for flow control. All D-boxes should remain at ground level for monitoring purposes and should not be covered with soil.

A d-box is made of concrete or heavy plastic and is approximately 20 inches high and 12 inches square. The number of d-boxes depends on the physical characteristics of the lot. All but the last leach line has its' own D-box.

4. **WHAT IS THE FUNCTION OF THE ELBOWS IN THE D-BOXES?** The elbows play perhaps the biggest role in the effectiveness of the leach field. Elbows can be turned so as to ensure the desirable liquid level throughout the entire trench. Each elbow should be turned and set so the sewage effluent level comes in contact with the bottom of the topsoil layer.

An elbow set at the correct height can make the difference between a fully utilized, effective trench and one that is under utilized.

5. **WHAT IS A SPLIT LEACH FIELD, AND HOW DOES IT WORK?**

A split leach field is a system that is divided into two identically sized areas. A diversionary "splitter" device prevents sewage effluent from entering one half of the sewage field, while allowing the other half to be used. The splitter device requires manual operation, and should be turned every six (6) months.

Research and field experience show that a split field is far superior to a single field.

6. **WHAT IS A CURTAIN DRAIN, AND WHAT ROLE DOES IT SERVE?** A curtain drain is a gravel filled trench and contains a flexible perforated pipe at the bottom, six inches deeper than the first leaching trench and diverts any surface water from entering the sewage disposal area. This drain line serves a very important purpose, preventing surface water from using up the available water space capacity that should be used for the sewage effluent dispersion. Please note, depending on the slope of the land, the curtain drain may only border one side of the system or it may surround the entire leaching trench area.

7. **WHAT IS THE REPLACEMENT AREA, AND IS IT NECESSARY TO HAVE ONE?** The replacement area is an area that can be used to install additional leach trench or an entire new system, if needed. It is important to have a designated replacement area or have a system that is designed to meet your future needs, should a problem arise.

8. **HOW CAN I FIND OUT MORE ABOUT THE PARTICULAR TYPE OF SEPTIC SYSTEM ON MY LOT?** You may contact the health department to see if we have any information regarding your lot. You might also want to contact a registered sewage installer for a thorough system evaluation. The health department can supply you with a list of registered installers.

9. **HOW WELL DOES AN ON-LOT SEPTIC SYSTEM WORK?** Research and field experience show that on-lot systems work efficiently, provided they are installed properly, maintained properly and not overloaded.

10. **CAN I INSTALL MY OWN SEPTIC SYSTEM?** This should never be done, unless you are a skilled septic installer. A septic system is a delicately balanced unit, installation must be done by a skilled professional.

11. WHAT HAPPENS IF I DON'T MAINTAIN MY SEPTIC SYSTEM? An on-lot septic system is a miniature treatment plant that is installed in the soil within the property boundaries. If it isn't monitored and maintained properly, you could endanger your family's health and that of your neighbors. Also, proper maintenance can avoid costly repairs or replacement.

12. HOW LONG WILL MY SEPTIC SYSTEM LAST? No one really knows exactly how long any septic system will last, but the following tips should help you get the most trouble-free time from your system:

- a) Have your tank(s) pumped every other year by a registered pumper. Every 3 months, remove the covers of the d-boxes and look for flooding in the d-boxes caused by plugged leach trenches.
- b) Adjust each elbow in the d-boxes to utilize the maximum capacity and effectiveness of each leaching trench.
- c) Look at your leach trench area at different times of the year; watch for wet areas and take appropriate steps to correct them.
- d) Do not overload your system by using too much water.
- e) Contact the Geauga County Health District for technical assistance.

13. WHY DO I NEED TO HAVE MY SEPTIC TANKS PUMPED? You need to have your tanks pumped because certain indissoluble solids will build up in the tanks over a period of time. The build-up of indissoluble solids in the septic tanks varies from household to household and is highly dependent on the amount and type of waste products being put into the system. If these solids aren't periodically removed, they will be discharged into the leach field and will plug the sidewalls of the leach trenches, rendering them useless. You may not be aware this process is taking place until it's too late, and the leach field must be replaced at great expense.

14. ISN'T MY SEPTIC SYSTEM MAINTENANCE FREE? There is no such thing as a maintenance free system. Don't buy the advertising claims of those who say their bottled additive will make it unnecessary for you to ever pump your septic tanks. There is no known-chemical or biological additive that can substitute for proper maintenance.

15. WHAT ARE A FEW GOOD TIPS TO FOLLOW SO I DON'T OVERLOAD MY SYSTEM?

- a) Develop a routine schedule of water usage
- b) Install water saving devices
- c) Check for leaky water lines
- d) Regulate the number of times-laundry is done each week

16. ARE THERE CERTAIN ITEMS THAT I SHOULDN'T PLACE IN MY SEPTIC SYSTEM? Never flush anything down your toilet except body waste and toilet tissue. With both sinks and toilets, use standard cleaning agents in

moderation. A septic system can become a nightmare if it's overloaded with chemical compounds. Certain chemicals can actually kill all bacterial action in a septic system. A good rule of thumb is, if you have to wear gloves to use a product, it's most likely harmful to your system.

Be careful about what you put down a garbage disposal—fruit and vegetable scraps won't harm your system, but meats and meat by-products will.

Specific items that should never be flushed down the toilet or poured down the sink include:

- *Paints
- *Dyes
- *Anti-freeze
- *Petroleum distillates and volatile by-products
- *Rubber products
- *Strong pesticides
- *Oils and oil-based substances, cooking fats and oils
- *Moderate use of standard toilet cleaning compounds

17. SHOULD I PLANT GRASS OVER MY LEACHING TRENCH FIELD? Yes! Plant grass immediately after the system is installed. Grass absorbs and transpires large volumes of liquid, reducing the amount that needs to percolate through the soil. Grass roots can penetrate as deeply as 18 inches into the soil. Keep grass cut to a height of 3 to 5 inches for maximum effectiveness.

18. CAN I USE A FARM TRACTOR TO CUT THE GRASS OVER MY LEACHING TRENCH FIELD? No! Be cautious with any rubber-tired vehicle on your leaching trenches, including lawn tractors. If you do use a lawn tractor to cut grass in this area, ride across (perpendicular to) the leach trenches rather than parallel. These precautions are especially important during wet conditions when the ground is soft.

19. CAN I PLANT A GARDEN OVER MY LEACHING TRENCHES? We do not recommend that you eat any plant(s) that has been grown near your sewage system.

20. HOW WILL I KNOW IF I HAVE A PROBLEM WITH MY SEPTIC SYSTEM? Generally, you'll see extremely wet areas; in certain instances, you'll see black or gray water coming to the surface and ponding on or around your leaching trench area. (This is called "bleeding out.")

21. WHAT SHOULD I DO IF CERTAIN AREAS OF MY LEACHING TRENCH FIELD ARE WET?

There is a 4-5step process to follow:

- * Remove the lids from all d-boxes.
- * Identify the specific trench where the "bleeding-out" is taking place.
- * Examine the elbow in the d-box at that trench and make proper adjustments to lower the water level in that leaching trench.
- *If necessary, add topsoil in the low areas where "bleeding out" is taking place. Watch how the system responds over the next few weeks. If the wetness decreases significantly, your problem is solved. If not, you might want to add additional leaching trench, assuming you have enough room to do so. To add more leaching trench, you'll need an alteration permit from the health department, and you should contract with a registered installer to do the job.

22. WHAT SHOULD I DO IF I THINK MY SYSTEM IS BEING OVERLOADED? Have the entire system pumped out by a registered sewage pumper and closely monitor your water usage. If this does not work, you may need to add additional leaching trench or curtain drain.

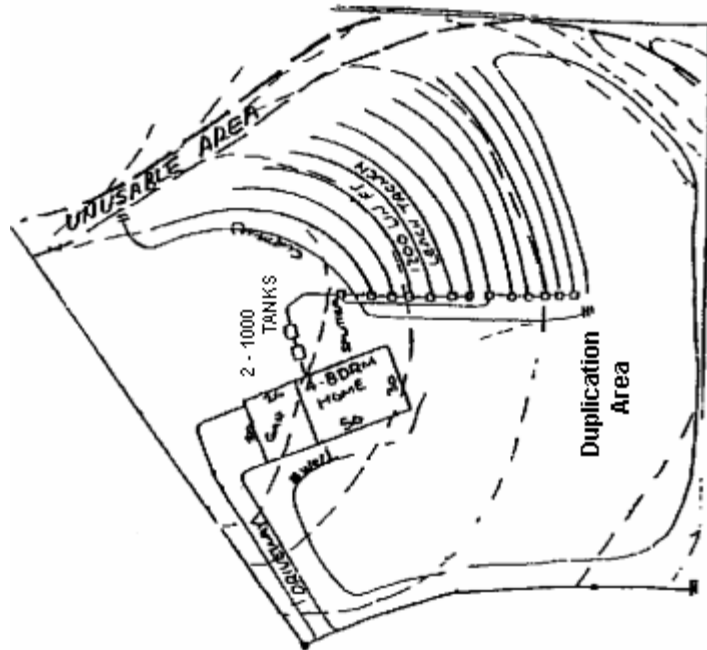
23. WHAT SHOULD I DO IF I HAVE SEWAGE EFFLUENT RUNNING ONTO MY PROPERTY FROM ANOTHER PROPERTY? It you suspect your neighbor's system is experiencing a problem and is overflowing into your yard, and he's not taking steps to correct the problem, submit a written signed complaint to the Geauga County Health District and we will investigate it.

DO'S & DON'TS REGARDING YOUR SEWAGE DISPOSAL SYSTEM:

1. DO: Inspect your septic tank(s) or aeration unit annually to determine if it needs to be pumped, if so contact a registered sewage pumper. We recommend pumping every 2-3 years, depending on usage.
 2. DO: Monitor the water usage so as not to overload your system. We recommend installation of water saving devices when possible.
 3. DO: Conduct a quarterly visual inspection of your leaching field area and all distribution boxes to assure it is not bleeding-out or being overloaded.
 4. DO: Familiarize yourself with the system's components and the role they play.
 5. DO: Unless you are well versed on the various types of sewage systems, it is recommended that only registered sewage installers do any work an your system.
 6. DO: Contact your local health department if you plan to have work done on your sewage system.
 7. DO: Keep your sewage leach field area mowed. We recommend that the grass be of the same height as it is for the lawn area.
1. **DON'T:** Put disposable diapers, cooking fats or grease, coffee grounds, cigarette or cigar butts, or other non-biodegradable items into the sewage disposal system.
 2. **DON'T:** Run your roof or gutter drains into the sewage system. This will overload your system. Surface water should be diverted away from the sewage system.
 3. **DON'T:** Throw any unused medication, paints, anti-freeze, oil-based substances, or petroleum by-products down the commode. It may cause problems with the bacterial action within the system.
 4. **DON'T:** Run large grass cutting machinery over the leach file area. A push mower or a small riding mower should be ok.
 5. **DON'T:** Run parallel with the leaching trenches when cutting the grass.

HOW DOES AN ON-LOT SEWAGE SYSTEM WORK?

Generally speaking, the sewage exits the house via the house sewer line into the two septic tanks/aeration unit where the bacterial decomposition begins. The heavier particles settle to the bottom of the tank(s) and the liquid level rises and is discharged out to the splitter box where it is directed to one half of the sewage leaching trench field. Once the sewage effluent passes through the splitter box (diversionary device) it goes into the first leach trench. After the first trench is full to capacity the effluent spills into the second trench via the elbow located in the distribution box. This process is repeated for each and every trench until each leaching trench in that half is full to capacity. Remember, all the sewage effluent is directed into one side of the leach trench field and once it is full to capacity, the diversionary device is then turned to allow the sewage to enter the other unused half while the other full side is allowed to rest.



AERATION SECTION

1. IS AN AERATION UNIT SUPERIOR TO SEPTIC TANKS? This question cannot be answered with a simple yes or no. One has to look at all of the advantages and disadvantages associated with each component. If you don't mind a small monthly electric bill and the occasional replacement of an aeration motor, then your answer may be to install an aeration unit. However, an aeration unit does produce a more acceptable sewage effluent discharge in comparison to a septic tank.
2. HOW DOES AN AERATION UNIT WORK? An aeration unit tank resembles the general appearance of a septic tank. However, this unit has the true capability of complete sewage digestion and treatment all within the unit. The aeration unit has an aeration motor which forces a calculated amount of air down into the sewage as it is being digested. Once the digestion process has been completed the treated effluent is then discharged out of the unit.
3. HOW MANY COMPARTMENTS ARE IN AN AERATION UNIT? This answer is dependent on the specific type of aeration unit installed. There may be as little as one or as many as three.
4. HOW MUCH DOES IT COST TO OPERATE AN AERATION UNIT? Generally \$15 per month, however, this is only an estimated cost and it will vary according to the amount of additional components.
5. HOW OFTEN DO I HAVE TO PUMP THE AERATION UNIT? Since there are different types of aeration units and different numbers of compartments, the frequency of pumping would depend on the unit in use and load capacity. Refer to the owners manual regarding this unit.
6. HOW OFTEN SHOULD A UNIT BE SERVICED? It is highly recommended that the aeration unit be serviced every 6 months.
7. SHOULD THERE BE ANY ODORS AROUND AN AERATION UNIT? No! There should never be an odor associated with a properly operating aeration unit. If you smell a sewage odor please contact your licensed aeration service personnel regarding this matter.

8. SHOULD -HERE EVER BE A REASON TO SHUT THE UNIT OFF?

No! The only time the aeration unit if OFF is while it is being serviced.

9. WHAT SHOULD I DO IF THE POWER SOURCE FAILS? You should check and reset all of the alarms and circuit breakers when power is restored. If the unit fails to operate, contact a licensed service person.

SUBSURFACE SAND FILTERS

1. HOW DO I KNOW IF THIS SYSTEM IS MALFUNCTIONING? In most cases, this is an off-lot type sewage disposal system that has a discharge line where the treated effluent comes out. You would note a detectable odor and a possible decrease in the discharge flow. The liquid level in the tank(s) would rise. In some instances the liquid waste will back-up into the house.

2. WHAT SHOULD I DO IF MY SAND FILTER IS EXPERIENCING A PROBLEM? Since subsurface sand filters are rather complicated and well beneath the surface of the ground, we would recommend you contact a registered sewage installer for a closer evaluation and corrective measures.

3. HOW DO I KNOW IF THE TREATED LIQUID DISCHARGE MEETS ACCEPTABLE SURFACE WATER DISCHARGE STANDARDS? There is no way to accurately determine by visual observations that the discharge meets the acceptable standards. The only way this can be determined is to collect a series of sewage effluent samples and have them submitted to the laboratory for analysis.

4. WHAT TYPE OF MATERIAL IS USED IN A SUBSURFACE SAND FILTER? From the top down, the first layer of media consists of 12 inches of gravel, the second layer consists of 18 inches of sand, the third layer consists of 12 inches of gravel. Please refer to sewage code for sand & gravel size & specifications.

5. HOW IS THE SIZE OF A SUBSURFACE FILTER DETERMINED? A subsurface sand filter is sized on the basis of 240 square feet per bedroom and subsurface sand filter is split into two equal halves. Reductions are possible, however, contact the Geauga County Health District for specific reduction criteria.

Private Water Well Section

1. WHAT IS A WATER WELL? A water well is any excavation that is used for the purpose of removing groundwater from an aquifer, regardless of design or method.

2. WHAT IS A POTABLE WATER SUPPLY? Potable water supply I means that the water is to be used for human consumption, culinary purposes or domestic use.

3. HOW MANY CATEGORIES OF WELLS ARE THERE? Generally speaking, there are two: Agricultural and Potable. An agricultural well is designed for any use other than human consumption. Some examples would include watering cattle, gardens, or lawns. Water from these wells should not be used for human consumption or allowed to come in contact with anything that will be consumed by humans. Potable wells are developed and designed specifically with the intent that the water will be consumed by humans.

4. HOW MANY DIFFERENT TYPES OF POTABLE WATER SOURCES ARE THERE? Generally speaking there are about 6 different types of water sources. These include ponds, springs, cisterns, artesian, hand dug, and drilled wells.

5. WHAT IS A WELL CASING? A well casing is a pipe or tubing that is inserted down into the ground via a drilled hole and is set at a specific depth in order to allow potable water to be extracted from the aquifer. A well casing is generally made of steel or heavy walled plastic pipe.

6. WHAT IS GROUT AND WHAT ROLE DOES IT PLAY? Grout is an inert natural material that is used to hold the well casing in place as well as aids in preventing surface contamination from going down the hole and entering the water table (aquifer). The most widely recommended type of grouting material is bentonite.

7. WHAT IS A GROUND WATER TABLE (AQUIFER)? It is the level or depth at which a potable water supply source may be found. Another name for ground water table is aquifer.

8. IS THERE MORE THAN ONE AQUIFER? Generally yes, In many instances you will find 3, however, this number may vary depending on the geological formation of the ground strata layer.

Aquifers are given specific names depending on the depth which they are found. Each aquifer is separated by a layer of rock strata and therefore somewhat protected from contamination from above. The upper most aquifer is most vulnerable to surface contamination; therefore, we should be very careful about throwing hazardous or toxic materials onto the surface of the ground.

9. WHAT IS A RECHARGE AREA? This is the area where the surface water permeates down through the soil and enters the ground water table (aquifer).

10. IS IT NORMAL PROCEDURE TO INSTALL A CHLORINATOR IF THE WATER TEST RESULTS INDICATE BACTERIAL CONTAMINATION? No! Generally speaking, chlorinators are only installed as a last effort to provide safe drinking water. The installation of chlorinators is not considered part of our routine process in the development of a safe potable water supply.

11. IS IT NECESSARY TO PROPERLY ABANDON UNUSED WATER WELLS? Yes! Water wells that are not properly maintained are potential routes for contamination to enter a water table and can travel long distances and affect many potable water supplies before they are detected, if detected at all. Therefore, it is imperative to keep all water wells properly maintained or properly abandoned.

12. WHAT SHOULD I DO IF I SUSPECT THERE IS SOMETHING WRONG WITH MY WATER SUPPLY? Contact the Geauga County Health District for their assistance and technical expertise. Registered Water Well Drillers are very knowledgeable in this area and can be consulted.

13. I'VE CHLORINATED THE WELL BUT I GOT AN UNSAFE SAMPLE RESULT, WHAT SHOULD I DO? Through past experience we have found in many instances that homeowners have failed to fully follow the complete chlorination procedures provided to them, resulting in an unsafe sample result. We strongly recommend that all items are given very close attention. Contact the local health department if you have any questions.

14. SHOULD I HAVE A CHLORINATOR INSTALLED JUST TO ASSURE MY WATER IS SAFE TO DRINK? NO! The installation of a chlorinator is not necessary unless all other corrective measures have been investigated and ruled out. Don't jump the gun and install a chlorinator, the best way to assure that you have a safe water supply is to have it tested on a yearly basis. If you are experiencing a problem obtaining a safe water sample contact the Geauga County Health District for additional suggestions and recommendations.

15. WHO CAN TEST MY WATER TO MAKE SURE IT IS SAFE? If the well is a newly developed well, only the Geauga County Health District can collect the sample and verify the test results as a final approval for the completed development of that private water source. For pre-existing water wells, there are approved water testing companies that offer that service. Costs vary from company to company. The Geauga County Health District offers a bacterial water testing program for existing wells at a reasonable cost. Contact this department for additional procedures regarding the water testing program.

Please note: The Geauga County Health District offers a chemical water testing program as well.

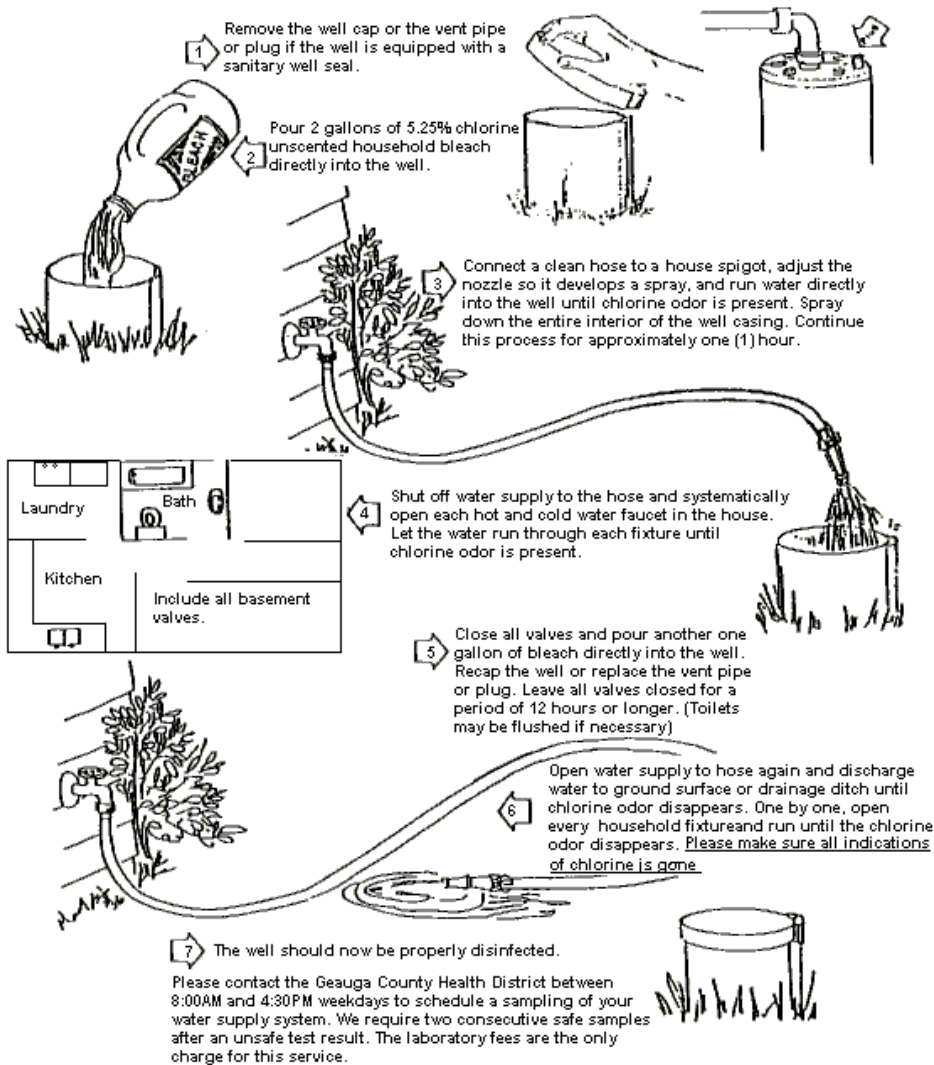
16. CAN I COLLECT THE SAMPLE AND DELIVER IT TO THE HEALTH DEPARTMENT FOR TESTING? NO! The collection procedure can only be done by authorized personnel of the Geauga County Health District.

17. HOW DO I CHLORINATE MY WATER SUPPLY? The following illustration contains the chlorination process for a drilled well. In most cases two gallons of chlorine (5.25% chlorine household bleach) will provide you with a sufficient quantity of disinfectant to properly chlorinate the well. However, depending on the depth of the well and how much plumbing you have in your house, you may need to add more than two gallons of chlorine to get the desired results. Please contact this department regarding the chlorination procedure to be used for water sources other than drilled wells.

WITH NY WATER SUPPLY?

Contact the local county health

HOW TO DISINFECT A WATER WELL SYSTEM



NOTE: The Geauga County Health District recommends that a certified well driller be engaged in the disinfection procedure. If, however, the homeowner wished to disinfect the water well, please follow these instructions carefully and thoroughly.

Plumbing-Section

- 1. WHERE DOES THE PLUMBING SYSTEM FOR MY HOUSE BEGIN?** Technically speaking, the plumbing system begins with the discharge pipe coming from the storage tank and includes all of the pipes that carry potable water throughout the entire dwelling.
- 2. WHERE DO I SHUT OFF MY WATER IF A PIPE BREAKS OR SPRINGS A LEAK?** Have your plumber show you where the various shutoff valves are located throughout the house. There is a main shut-off valve located on your pressure tank in case of an emergency. If you happen to have city water, the main shutoff is located at or very near the water meter (in your house).
- 3. WHY IS THE TEMPERATURE ON MY HOT WATER TANK SET AT 120 DEGREES FAHRENHEIT?** The Ohio State Code requires that water that is to be used for hand washing can be no more than 120 degrees Fahrenheit because higher temperature settings could cause scalding.
- 4. WHY IS THERE A SUMP PUMP IN MY BASEMENT?** Generally, a sump pump is placed in the basement to remove (pump out) any clean water due to basement or footer drain leakage. Please note, only clean water is allowed to be discharged out onto the surface of the ground.
- 5. DO ALL TOILETS MAKE A LOT OF NOISE WHEN FLUSHED?** No! There are some toilets that are very quiet. If you think your toilet makes too much noise, perhaps you may want to contact your local plumbing supply company.
- 6. IF I AM EXPERIENCING A PROBLEM WITH MY SEWER LINE, WHO SHOULD I CALL?** If you happen to have a sanitary sewer, you should call the Sanitary Engineers Office. However, if you have a septic system, you should contact a registered plumber or a registered sewage installer. It may just be a case of a blockage within the building sewer line from the house to the septic tank.
- 7. WHY IS THERE A RING OF WETNESS AROUND MY WATER TANK?** The cold water coding from the aquifer enters the water tank and mixes with the existing warmer water already in the tank, the colder water goes to the bottom of the tank and develops a ring of condensation around the outside of the tank at the same height or level where the two meet.
- 8. WHY IS IT THAT WHEN I AM TAKING A SHOWER AND SOMEONE FLUSHES THE TOILET, THE WATER COMING FROM THE SHOWER EITHER GETS HOTTER OR COLDER?** If you have a private water well, the pressure change from the tank to the water outlet generally ranges from 20 to

30 pounds. When you demand water usage from more than one outlet, this pressure change causes the temperature change to take place.

9. WHAT IS THE FUNNY LOOKING DEVICE ON TOP OF MY OUTSIDE FAUCETS? These devices are called "back flow preventors" and prevent potentially contaminated water from flowing back into your potable water supply. If you don't have these devices on your outside faucets you may want to consider installing them as a precautionary measure.

10. CAN I USE PLASTIC PIPE TO PLUMB MY HOUSE OR DO I HAVE TO USE COPPER? You can use plastic pipe to plumb your house. However, before you purchase the pipe, check with the Geauga County Health District to make sure the pipe meets the acceptable standard code.

11. CAN I USE LEAD SOLDER TO SOLDER THE COPPER PIPE JOINTS TOGETHER? Yes! However, the only lead solder that can be used in a potable water supply must meet the Federal Environmental Protection Agency standard.

GENERAL STATEMENT

It is everyone's responsibility to assist in protecting the environment and we must all take that responsibility very seriously. Our environment is a terrible thing to waste!