



# Queen Anne's County Sanitary District

Phone Number: **410-643-3535**



## Information and Instruction for Southern Kent Island Sewerage Customers

Office Hours:

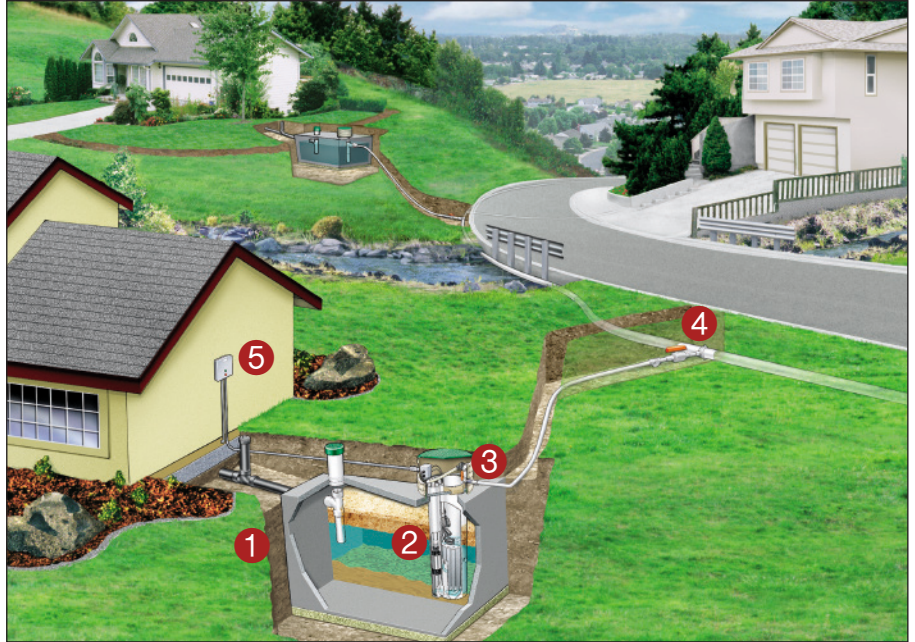
Monday - Friday, 7:30am to 4:30pm  
(410) 643-3535

310 Bateau Drive  
Stevensville, MD 21666

# An Introduction to Your Wastewater System

*Your house has an effluent sewer system that is serviced and maintained by the Queen Anne's County Sanitary District.*

*Effluent sewers are different from the sewer you may be used to. Effluent sewers are like a water system in reverse, with a watertight underground tank situated in the yard. (See illustration.)*



## *Here's how it works:*

- 1 Wastewater flows from your house to the underground tank. There, it settles into three layers: sludge on the bottom, scum on the top, and clear effluent in the middle.
- 2 The effluent is pumped through a filter.
- 3 Then the filtered effluent (and ONLY the effluent) flows through service lines, to a main line,
- 4 The main line runs to our treatment plant in Stevensville.
- 5 A control panel operates the pump, which pumps the effluent out of your tank, to the treatment plant.

Solids remain in the tank, where they decompose naturally. The whole system is environmentally friendly and energy efficient.

Queen Anne's County Sanitary District checks your system regularly, maintains the pump and control panel, and pumps the tank when necessary. System maintenance and tank pump-outs will be routinely scheduled about every five years.

If you take good care of your system, it will work quietly and invisibly for you, just like any other sewer system. That means, you **should never**:

- Pour grease down the drain.
- Pour harsh de-cloggers, such as Drano®, down the drain. (Use a plunger or metal snake instead.)
- Flush any nonfood items down the drain (for example, no diapers, no sanitary napkins, no condoms).

Enclosed is a homeowner's manual with more information about "Do's and Don'ts" for your system. Please familiarize yourself with this pamphlet. It is everyone's responsibility to take good care of our new public sewer system.

If you have any problems with your wastewater system, please call Queen Anne's County Sanitary District at (410) 643-3535.

# HOMEOWNER'S MANUAL

**For South Kent Island Sewer Sub-District**

## How to Take Care of Your Wastewater System

*Congratulations!* Your home is on an Orenco® Effluent Sewer that's maintained by the Queen Anne's County Sanitary District.

That means, you have a watertight underground tank in your yard that stores and filters household wastewater, before the filtered effluent is pumped out for additional treatment. This is a highly engineered system that uses very little electricity and protects the environment.

Your system will work better and last longer if you learn what can go into it – and what can not.

As a general rule, nothing should go down the drain that hasn't first been ingested, other than toilet paper, mild detergents, and wash water. In fact, this is true for all sewer systems, gravity sewers included.

This booklet explains the do's and don'ts of your wastewater system. **Do** read this booklet. **Do** explain this information to your family and guests. **Do** call the Sanitary District if you have any questions. With proper care, your wastewater system will last for many decades!

24/7/365 Phone Number: **410-643-3535**



## Do's and Don'ts for INSIDE the House



**Don't** flush dangerous and damaging substances into your wastewater treatment system. (Please refer to the "Substitutes for Household Hazardous Waste," on the next panel.) Specifically, do not flush . . .

- Pharmaceuticals / Drugs
- Excessive amounts of bath or body oils
- Water conditioner backwash
- Flammable or toxic products
- Household cleaners, especially floor wax and rug cleaners
- Excessive chlorine bleach, chlorides, and pool or spa products
- Pesticides, herbicides, agricultural chemicals, or fertilizers



**Don't** use special additives that are touted to enhance the performance of your tank or system. Additives can cause major damage to other areas in the collection system. The natural microorganisms that grow in your system generate their own enzymes that are sufficient for breaking down and digesting nutrients in the wastewater.



**Do** collect grease in a container and dispose with your trash. And avoid using garbage disposals. Compost scraps or dispose with your trash, also. Food by-products accelerate the need for septic pumping and increase maintenance.



**Do** use your trash can to dispose of substances that cause maintenance problems and/or increase the need for septic pumping.

Dispose of the following with your trash:

- Egg shells, cantaloupe seeds, gum, coffee grounds
- Tea bags, chewing tobacco, cigarette butts
- Condoms, dental floss, sanitary napkins, diapers
- Paper towels, newspapers, candy wrappers
- Rags, large amounts of hair
- "Flushable" wipes, baby wipes, medicated wipes, cleaning wipes



**Do** keep lint out of your wastewater treatment system by cleaning the lint filters on your washing machine and dryer before every load.

**Don't** plumb water conditioner discharge brine into your wastewater system. The softened WATER is OK, just not the BRINE that's produced during the regeneration cycle.

**Do** route the brine around your wastewater system so it discharges directly into the soil. This is a cost-effective solution that ensures the long-term performance of your sewer system and the biological processes that occur inside the tank.

Water conditioner brine degrades treatment by interfering with the settling process inside the tank. Without proper settling, solids, grease, and oils are carried through your system, clogging components. This increases maintenance costs by...

- requiring the tank to be pumped more often
- requiring filters to be cleaned more often
- fouling other downstream equipment

## Do's and Don'ts for INSIDE the House



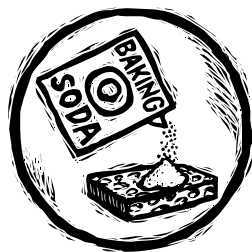
**Don't** ignore leaky plumbing fixtures; repair them. A leaky toilet can waste up to 2,000 gallons of water in a single day. That's 10-20 times more water than a house-hold's typical daily usage.



**Don't** use excessive amounts of water. Using 50 gallons (200 liters) per person per day is typical. If your household does not practice any of the "water conserving tips" below, you may be using too much water.

**Do** conserve water:

- Take shorter showers or take baths with a partially filled tub. Be cautious about excessive use of large soaking tubs.
- Don't let water run unnecessarily while brushing teeth or washing hands, food, dishes, etc.
- Wash dishes and clothes when you have a full load.
- Use water-saving devices on faucets and showerheads.
- When replacing old toilets, buy low-flush models.



**Do** use substitutes for household hazardous waste. Replace the following hazardous products with products that are less environmentally harmful. The hazardous cleaners are listed below, followed by the suggested substitute.

### Ammonia-based cleaners:

- For surfaces, sprinkle baking soda on a damp sponge.
- Or for windows, use a solution of 2 tbs (30 mL) white vinegar to 1 qt (1 L) water. Pour the mixture into a spray bottle.

### Disinfectants:

Use borax: 1/2 cup (100 g) in a gallon (4 L) of water; deodorizes also.

### Drain decloggers:

Use a plunger or metal snake, or remove and clean trap.

### Scouring cleaners & powders:

Sprinkle baking soda on a damp sponge or add 4 tbs(50 g) baking soda to 1 qt (1 L) warm water. Or use Bon Ami® cleanser; it's cheaper and won't scratch.

### Carpet/upholstery cleaners:

Sprinkle dry cornstarch or baking soda on, then vacuum. For tougher stains, blot with white vinegar in soapy water.

### Toilet cleaners:

Sprinkle on baking soda or Bon Ami; then scrub with a toilet brush.

### Furniture/floor polishes:

To clean, use oil soap and warm water. Dry with soft cloth. Polish with 1 part lemon juice and 2 parts oil (any kind), or use natural products with lemon oil or beeswax in mineral oil.

### Metal cleaners:

- Brass and copper: scrub with a used half of lemon dipped in salt.
- Stainless steel: use scouring pad and soapy water.
- Silver: rub gently with toothpaste and soft wet cloth.

### Oven cleaners:

Quickly sprinkle salt on drips; then scrub. Use baking soda and scouring pads on older spills.



### Laundry detergents:

Choose a liquid detergent (not a powder) that doesn't have chlorine or phosphates.

*Continued on back page*

## Do's and Don'ts for OUTSIDE the House



**Don't** enter your tank, ever! Gases that can be generated in the tank and/or oxygen depletion can be fatal.

**Do keep the tank access lid secure to the riser at all times** with stainless steel lid bolts. If bolts are lost or damaged, call the Sanitary District immediately for replacement. If the tank lid becomes detached from the riser or if the lid or riser becomes damaged, **BLOCK ACCESS TO THE TANK OPENING IMMEDIATELY AND KEEP CHILDREN AWAY** until all repairs are made.



**Don't** dig without knowing the location of your wastewater system. Call Miss Utility before you dig at 800-257-7777. Any damage caused to the system will be your financial responsibility to repair if Miss Utility is not contacted. As much as possible, plan landscaping and permanent outdoor structures before installation. But easily removable items, such as bird baths and picnic tables, are OK to place on top of your system.



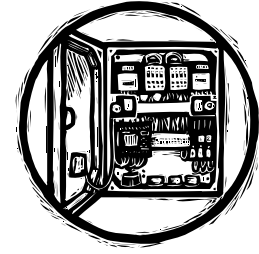
**Don't** drive over your tank or any buried components in your system, unless it's been equipped with a special traffic lid. If the system is subject to possible traffic, put up a barricade or a row of shrubs.



**Don't** dump RV waste into your wastewater system. It will increase the frequency of required septage pumping. When dumped directly into the pumping vault, RV waste clogs or fouls equipment, causing undue maintenance and repair costs. Also, some RV waste may contain chemicals that are toxic or that may retard the biological digestion occurring within the tank.

**Don't** ever connect rain gutters, storm drains or sump pumps to the sewer system or allow surface water to drain into it. And don't discharge hot-tub water into your sewer system. The additional water will increase costs, reduce the capacity of the collection and treatment systems, and wash excess solids through the tank.

## At the Control Panel



**Do** familiarize yourself with the location of your wastewater system and electrical control panel.

**Important! Caution!**  
Only Sanitary District personnel should work on your control panel.

**Do** take immediate action to correct the problem in the event of an alarm condition. Call immediately whenever an alarm comes on. (It sounds like a smoke alarm.) Service is available 24 hours a day.



**Do** remember that the audible alarm can be silenced by pushing the lighted button located directly above the "Push to Silence" label on the front of the electrical control panel. Hold the button until the alarm goes off.

**With normal use, the tank has a reserve storage capacity good for about 24 hours.**

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Emergency Phone Number:  
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# How to Handle Alarms and Power Outages



## Handling Alarms

You have a control panel for your wastewater system outside of your home. The control panel has a red light and alarm on the front.

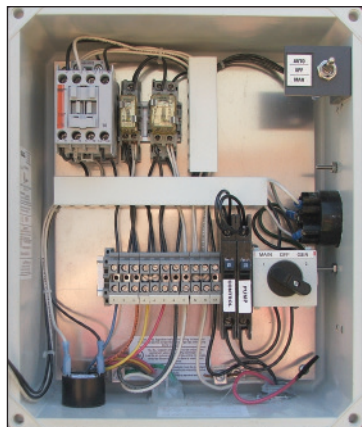
If the liquid in the wastewater tank gets too high or too low, the red light and a loud alarm

will come on. To silence the alarm, press the red light on the front of the panel. Then call Queen Anne's County Sanitary District at (410) 643-3535. Service is available 24 hours a day.



## Handling Power Outages

Your tank has 24 hours of reserve capacity for emergencies. During a long power outage, say, after a hurricane, you can use a portable generator (that's at least 4,000 Watts) to power the panel so that your tank doesn't get too full. The panel has a 120 V receptacle to which a standard extension cord can be connected.



Inside the panel are two switches: one labeled AUTO/OFF/MAN, and one labeled MAIN/OFF/GEN.



The AUTO/OFF/MAN switch should stay in the AUTO position, regardless of whether you are using main power or generator power.

To connect a generator to the panel, turn the MAIN/OFF/GEN switch to the OFF position.



Connect the extension cord from the generator to the receptacle on the side of the panel and start the generator. Then switch the MAIN/OFF/GEN switch to the GEN position. If the tank is full, the alarm and light will come on. Press the lighted button to silence the alarm, and the pump will pump the tank down to the normal level.

After the pump goes off, you can unplug the generator and return the MAIN/OFF/GEN switch to MAIN while waiting for power to be restored. Since the tank has at least 24 hours' reserve capacity, you probably won't have to pump the tank more than once a day — and maybe less. Because, during a power outage, you probably won't be using as much water as usual.

Note as power for the pump comes directly from the electric meter, a whole-house generator **WILL NOT** power the pump. You will still need to run an extension cord as noted above.

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# Frequently Asked Questions

## *Are effluent sewer systems new?*

No. They've been around for decades. There are hundreds of systems in the U.S., and they are highly recommended by the EPA.

## *Will there be lots of service people on my property?*

No. Service time averages less than 1 hour every 5 years per home.

## *Will the system smell?*

No. Not if properly designed and installed. Any wastewater collection system will smell if not properly designed and installed. If you do detect odors please call us for service.

## *Do the pumps use a lot of electricity?*

No. The electricity to run them averages less than \$3 per month. About the same as your well pump.

## *Do I have to do anything different, since I have an underground tank?*

You have to be careful about what goes down household drains. Read the "Do's and Don'ts" in your Homeowner's Manual. Actually, these "Do's and Don'ts" also apply to people who have traditional sewer systems. With misuse, they can get clogged and damaged, too.

## *What happens to the solids that accumulate in the tank?*

The tank digests more than 80% of the solids. The rest are easily managed through planned pumping schedules undertaken by the Sanitary District at no additional cost.

## *What happens to the effluent that leaves the tank?*

It goes to a treatment plant located in Stevensville where it is treated to state discharge permit limits before being discharged into the Chesapeake Bay.

## *What if something goes wrong with my tank?*

Each property has a control panel with an alarm. If something goes wrong, you silence the alarm and call Queen Anne's County Sanitary District at (410) 643-3535. 24/7

## *Do I/we ever go inside the panel?*

Only during extended power outages when you wish to use a portable generator. If you don't have an emergency generator and you begin to experience back-ups into your home, call the Sanitary District and a vacuum truck will be dispatched to pump down the tank.

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