



Department of Public Works
BUREAU OF UTILITIES

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**ON-SITE WASTEWATER
TREATMENT SYSTEM USER'S GUIDE**

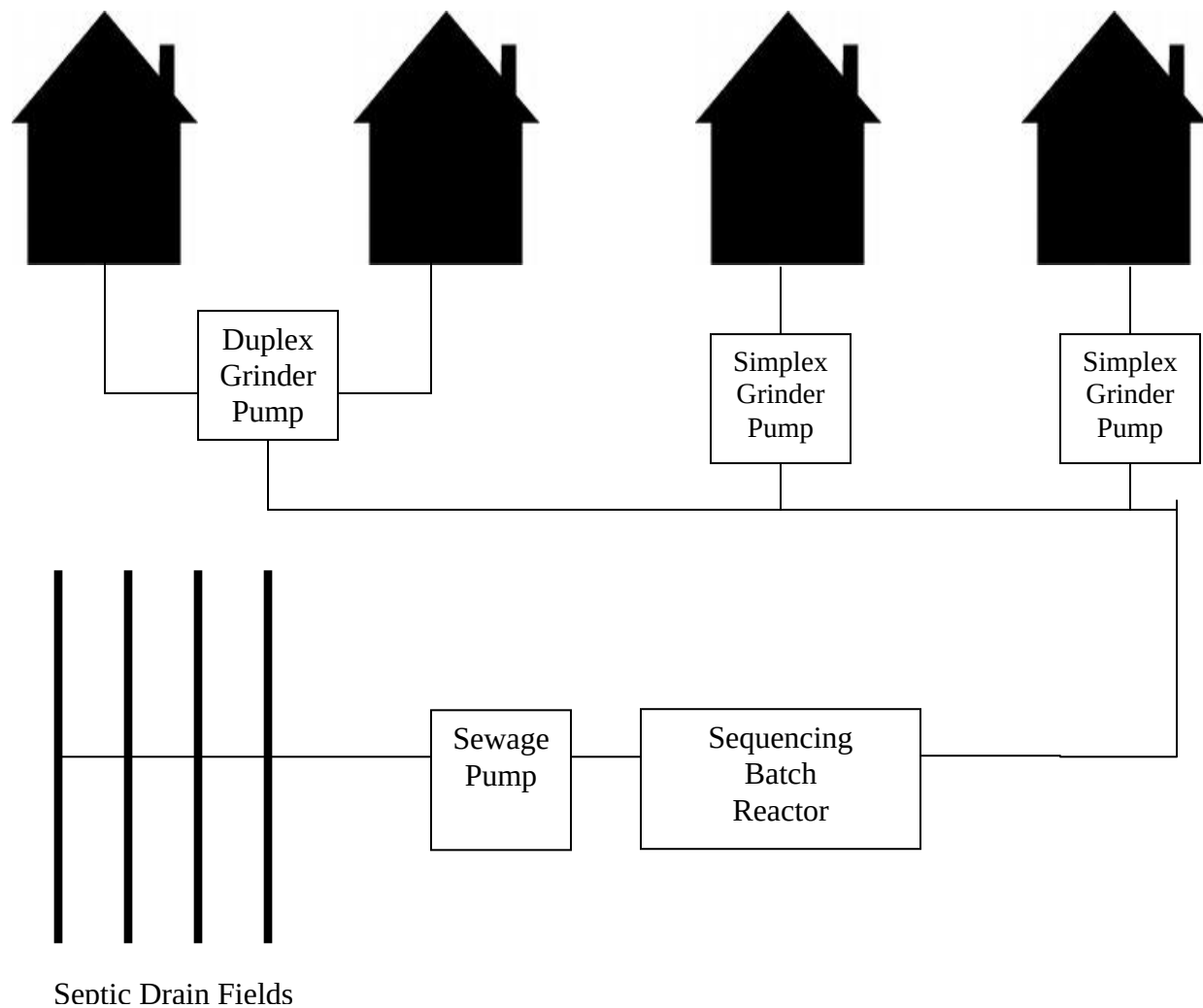
**WALNUT CREEK WASTEWATER COLLECTION,
TREATMENT AND DISPOSAL SYSTEM**

**USER MANUAL
COUNTY-OWNED ON-SITE WASTEWATER TREATMENT**

Revised January 2014

System Features:

Residents in areas with public sewer have their sewage piped to a municipal treatment plant where it is usually treated and discharged to a receiving body of water. Other residents have their sewage treated in individual On-Site Sewage Disposal Systems (OSDS) where treatment begins in a septic tank and then discharges to a drain field on their property. Your community is served by a shared septic system, which combines features of both the municipal treatment plant, and OSDSs. Referring to the diagram below, sewage leaves your house and a grinder pump pumps the sewage into a collection system located in the public right of way. The collection system pipes the untreated sewage to your neighborhoods wastewater treatment system, which is a Sequencing Batch Reactor (SBR). The treated sewage is then pumped to a use-in-common drain field located on property owned by the homeowners association.



What are the advantages to using a shared septic system?

1. Homes that are hooked into a shared septic system have yards with no restrictions on building accessory structures, pools, and decks other than maintaining a 30-foot separation from the water well. Homes with on-site septic systems often have limitations or will not accommodate accessory structures, pools and decks.
2. The Howard County Bureau of Utilities (BOU) is responsible for the operation, maintenance and ultimate replacement of the shared septic system. The BOU is also responsible for the operation and maintenance of the grinder pump located in the utility easement at the front of your property. This includes emergency response by a maintenance professional 24 hours a day, 7 days a week. You are only responsible for the maintenance of the line from your house to the metal cleanout by the grinder pump cover. Owners of individual OSDs are responsible for the operation, maintenance and replacement of their entire system.
3. It is better for the environment! Nitrogen is a type of nutrient that contributes to the Chesapeake Bay's poor water quality. In a shared septic system, the added treatment by the SBR discharges effluent that has less nitrogen (8 to 10 mg/L) than that from an on-site sewage disposal system (200 – 400 mg/L).
4. It returns water to the ground rather than discharging it to surface waters like a municipal treatment system does.
5. The use of a shared septic system leads to the clustering of homes, which allows for the preservation of open space and agriculture.

How are the fees for use of the shared septic system decided upon?

Initially, the fees for using the shared septic system are set by the developer of the subdivision, Walnut Creek LLC. They are responsible for the operation and maintenance of the system for at least one year past 80% occupancy of the lots utilizing the shared septic system. Once the system is dedicated to Howard County, the Bureau of Utilities then becomes responsible for the setting of fees. Each shared septic system is unique, therefore, fees are calculated on what it actually costs to maintain and ultimately replace the system in your neighborhood. Your user fees may be higher than typically charged for the use of a municipal treatment system because the costs are shared by only one hundred and forty nine (149) homeowners. There are three components to the total fee amount:

- Most of the yearly costs are associated with the general operation and maintenance of the system. This includes but may not be limited to County labor costs, contract services for operation and maintenance, lawn care, replacement equipment and any necessary parts and supplies.
- A fund is set aside for the future replacement of the drain fields.
- There is a risk pool set aside for the *pre-mature* failure of the drain fields.

Each year the costs are compared to the total revenues collected. If there is a need for a fee increase or decrease, your homeowner's association will be notified.

The following is a list of recommendations to keep the shared septic system operating properly:

Do's	Don'ts
Familiarize yourself with the location of the following objects on your property: • Emergency contact phone number – this can be found on the cover of the pump control panel, it is 410-313-4900 • Pump control panel • Sewer standpipe cleanouts • Sewage grinder pump chamber • Curb stop valve box • Well for drinking water Pushing the rubber sealed button located on the underside of the pump control panel can silence the high-level alarm buzzer. Leave the area over and around the public standpipe cleanout, grinder pump chamber, and pump control panel visible and free of obstructions. Place kitchen waste in the garbage. Use a strainer in the kitchen sink. Call 410-313-4900 if; the alarm control light or buzzer should go off, you are experiencing a sewer backup or observe any surface discharge. County personnel will inspect and diagnose the problem. If the problem is found to be with equipment that is owned by Howard County, the County will fix the problem. If it is determined that the problem is in the line connecting the house to the cleanout standpipe located at the public/private property easement, it will be the homeowner's responsibility to maintain and repair. When the pump is in a state of alarm, you should minimize your water usage.	DON'T subject the sewer cleanout standpipe to vehicular traffic, or place any permanent construction over these items. DON'T obstruct access to the sewer cleanout standpipe, pump chamber, or pump control panel. There should be no landscaping within 5 feet of the pump control panel and no landscaping or mulch within 12 feet of the pump chamber or cleanout standpipe. DON'T connect, tie in, or divert any gutter downspout, surface runoff water, storm water, basement sump pumps, or well water treatment/softener system backwash to the shared septic system. DON'T install an in-sink garbage disposal. Howard County Code prohibits their use when your method of sewage disposal is on-site. DON'T put fats, oil or grease into the shared septic system. DON'T use automatic dishwashers that have built in disposals or add enzymes. DON'T use automatic toilet bowl cleaners; they kill bacteria in the treatment process. DON'T flush flammable, toxic, or hazardous waste (such as degreasers, pesticides, herbicides, fungicides, strong disinfectants, prescription medications, fuels, paints, stains, varnishes, paint thinners, or solvents) into the shared septic system. DON'T wash out paint brushes or drywall compound into the shared septic system.

DO's	Don'ts
Place cooking oils and grease into a container to cool off. Then dispose of the waste into the garbage. Carefully measure soaps, detergents, and disinfectants. Hook up “domestic wastewater” only to the gravity sewage collection discharge from your home. If it doesn't come from washing or using the toilet, don't put it into the Shared Septic system. Always practice water conservation: • Be sure all water using devices in the home operate properly • Install water saving devices (low flow showerheads, faucet aerators, and toilet tank dams). • Repair leaking toilets and faucets • Run washing machine and dishwasher only when you have a full load • Spread out the laundry: wash the clothes over a period of several days • Keep a bottle of cold water in the refrigerator Properly dispose of hazardous household chemicals. Maintain good surface water drainage away from the sewage grinder pump chamber located on your property. Direct water treatment/softener back wash water away from the shared septic system and drinking water wells. If a whole house generator is installed and the well pump is connected to the generator, the electrician must also connect the County owned grinder pump. Failure to do this could lead to sewage backing into your house or flooding of your yard.	DON'T flush paper towels, sanitary napkins and pads, or cloth goods into the shared septic system. This includes flushable wipes, disinfecting wipes and baby wipes. DON'T put abrasive material (such as aquarium gravel, kitty litter, glass, egg shells, sand, stone, plastics, or dirt) into the shared septic system. DON'T put any of the following items in to the shared septic system: • Explosives • Flammable material • Strong chemicals • Gasoline • Lubricating oil and /or grease DON'T add any agents or treatment chemicals to the septic tank that claim to assist its natural bacteriological process. Adding chemicals may only interfere with the natural function of shared septic system. <i>Failure to follow these guidelines by putting any of the above items into the shared septic system can cause pre-mature failure of the drain fields, cause the SBR to malfunction and/or ruin the grinder pump serving your house. Premature failure may require an increase in the yearly fees for the entire neighborhood. Or in situations where it is possible to trace the cause of failure back to an individual homeowner, the homeowner may be individually liable for replacing or repairing the damaged parts of the system.</i>

