UNDERSTANDING YOUR GRINDER PUMP
The Grinder Pump

In Loudoun County, wastewater is collected and treated in many ways. Most wastewater collection relies on the force of gravity to pull it through miles of pipe, ending at a wastewater treatment facility. Since not every area in the County can benefit from gravity service, some areas rely on a pressure system or a pump to facilitate wastewater collection. Pumps can serve one household or many households. Your home is one of approximately 400 homes served by Loudoun Water that has its own wastewater pump, also known as a grinder pump.

The grinder pump that facilitates wastewater removal from your home is owned and serviced by Loudoun Water. The remaining components of the service connection are owned by the homeowner, but serviced by Loudoun Water through Freemire and Associates or its representative. A grinder pump system does require that you take a more active role than residents served by a gravity system.

The Grinder System and your Grinder Pump Service Connection are defined in Loudoun Water’s Rates, Rules, and Regulations (R, R, & R). The R, R, & R document can be found at www.loudounwater.org. Should the Grinder System be compromised by unauthorized products (see Protecting Your Pump in this brochure), Loudoun Water will service the Grinder System and issue a warning notice to the Resident User, which is the person(s) registered as a sewer customer of Loudoun Water and responsible for payment of invoices rendered for said service. Upon subsequent occurrences, Loudoun Water will charge the Resident User a fee in accordance with Loudoun Water policies.
How It Works

Your grinder pump is located inside a holding tank made of polyethylene plastic. The tank is installed in the ground on your property. What you see at the surface is just the green cover of the tank. All of the wastewater generated in your home flows into this tank. When the wastewater in the tank reaches a preset level, the grinder pump automatically turns on, grinds the waste, and forces it out of the tank and into the Loudoun Water wastewater collection system. The grinder pump will normally run for one or two minutes and automatically turn off when the tank is emptied. The pump is programmed to operate in cycles, rather than continuously. Cycles are determined by the amount of water used. Usually after 20 gallons have entered the tank, your grinder pump will turn on. On a typical day, this cycle will repeat itself 10 to 20 times.

The grinder pump is powered by electricity and is connected to the electric service lines at a black or gray pump control panel box usually located on the outside of your house. Loudoun Water or its representative will service control panel components. Electricity charges for your grinder pump are typically less than one dollar per month and are included in your monthly electric bill. It is important that the electrical supply to the pump control panel box remain a dedicated circuit, not supplying power to other appliances or fixtures. The PVC conduit between the pump control panel and the grinder pump chamber is the customer’s responsibility to repair/replace. The components outlined in red in the image below are Loudoun Water’s service responsibility.
Protecting Your Pump

Your grinder pump can handle any wastewater normally discharged to the sewer from the kitchen, bathroom, or laundry. However, some chemicals and materials may cause operating problems or safety hazards. Check the labels on all chemicals before using.

Never pour the following items down your drains or flush them in toilets:

- Cooking fat (oil, grease, lard)
- Any explosive or flammable material
- Any strong chemical or toxic, caustic, or poisonous substance
- Degreasing solvents
- Diapers, socks, rags, sanitary napkins, or cloth of any kind
- Gasoline, kerosene, fuel oil, paint thinner, or antifreeze
- Lubricating oil or grease
- Metal, plastic, or latex objects (toys, utensils, condoms, etc.)
- Seafood shells, animal bones, or cat litter
- Biohazardous Materials
- Disposable Wipes (including those that state flushable or biodegradable)

These could clog or damage your system or create unsafe conditions in your lines and tank. Sump pump and roof drains discharging to your building drain and into the grinder pump chamber are prohibited. These types of connections will cause your pump to run excessively, which will raise your electrical costs and may shorten the life of your grinder pump. Also, please avoid running your lawn mower or vehicle over the green lid. The green lid is fragile and may break. Customers are responsible for the cost of replacement lids. Please do not cover the lid with mulch, dirt, stone, automobiles, fences, decks, or other obstructions that would prevent its removal in an emergency, or restrict the flow of air.
Grinder Pump Alarm

Your grinder pump is fitted with an alarm in case of failure. If there is a failure, the tank that contains the pump will become too full and the alarm and light, located on the black/gray pump control panel box will automatically turn on. If the alarm sounds, please follow these important steps:

» Discontinue water use to prevent overflows.

» Silence the alarm by pressing the silence button on the bottom of the pump control panel box. The light will remain on.

» Wait 15 minutes before taking further action. A high water level will sometimes cause the alarm to go on. This situation is often self-correcting and the holding tank will automatically pump down. If 15 minutes have passed and the alarm light is still on, call Freemire & Associates, Inc. 24 Hours a Day, 7 Days a Week: 888-349-7448.

» Never attempt to open the tank cover or the electrical panel box. Emergency crews are on duty 24 hours a day, seven days a week and will respond promptly. A defective unit will immediately be repaired or replaced.

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Going on Vacation

If you will be away from your home for seven days or more, there is a step you can take to minimize odors and reduce the risk of damage to your home. Ideally, you want to replace the wastewater in the tank with clean water. To do this, run an inside faucet for about 10 minutes or 30 gallons, just long enough for the grinder pump to begin working. To verify that the pump is running, it may be necessary to go outside near the pump and listen for it to start. After the pump starts, turn the faucet off. The grinder pump will run until the tank is empty and shut off automatically. This process will cleanse the pump and keep it filled with a minimum amount of clean water.

Always leave the power on, because a heating element inside many of the pumps helps eliminate condensation and freezing. This may also help to protect your home from flooding should a plumbing failure or leak develop while you’re away.
For alarms and service, please call:

Freemire & Associates, Inc.
24 Hours a Day, 7 Days a Week
888-349-7448
www.freemire.com