Muscle Shoals

Utilities Board

Water and Wastewater Department

HOMEOWNER'S MANUAL

FOR YOUR WASTEWATER
COLLECTION AND DISPOSAL

MUSCLE SHOALS, ALABAMA

GRINDER PUMP SYSTEM GUIDE

Contact Information

Muscle Shoals Utilities Board (MSUB)

256-386-9260

EMERGENCY CALLS: MSUB does not maintain your pump or the discharge line to the service box. In the event of an emergency on the system beyond what you are responsible for maintaining, we have personnel on stand-by to receive your call.

Congratulations on your new home and having it connected to the MSUB wastewater system.

The utility which owns and operates the system serving your home is only responsible for maintenance and operation of all system components beyond the service box and your property boundaries.

If a wastewater problem arises that appears to be beyond the plumbing in your home, grinder pump station, and the outfall line from your home to the service box, you should contact the Muscle Shoals Utilities Board.

Your system will also work better and last longer if you learn what can go into it - and what cannot. Little effort is required. Just read and practice the 'do's and don'ts' that follow. Every member of your household should be familiar with these requirements.

KEEP THIS MANUAL: Please retain this manual with important papers related to your home purchase.

Grinder Pumps

IMPORTANT: The following is important information if your home wastewater system is equipped with a grinder pump.

What is a grinder pump?

A grinder pump is a pump unit located at a low point in your house or in your yard where the wastewater drains from the house that grinds the wastewater up and pumps it to the nearest gravity sewer in the public street.

How does a grinder pump work?

Wastewater from your home flows down your drains and collects in a holding tank. When the wastewater in the tank reaches a certain level, it automatically activates the pump to grind up your sewage into small particles. The pump then generates enough pressure to push the wastewater through your sewer line to the MSUB's collection main at the street.

Why do I need a grinder pump?

The wastewater system to which you are connected is a low-pressure system. Your home's plumbing may include a grinder pump system. Grinder pumps are used in neighborhoods where site conditions such as building elevations and ground slopes make construction of conventional 'gravity sewers' impractical. Grinder pumps made development of your neighborhood and home possible. Your grinder pump system safely and efficiently pumps wastewater created inside your home into the wastewater collection and treatment system serving your property.

What if the grinder pump fails?

Your licensed plumber must either repair the pump or replace it with the same (or current equivalent) model grinder pump. The installation of any other type pump may clog and or damage both yours and MSUB's downstream pipelines.

Alarm and Power Information

What should I do if my grinder pump alarm goes off?

If there is too much flow going into your grinder pump unit, the high sewage level will automatically trigger an alarm horn and light to alert you of the problem. In many instances, the problem could be an excessive amount of flow to the grinder pump. You should take the following steps:

- Immediately discontinue your water use to prevent overflow.
- Wait fifteen minutes before taking further action. A high level of water usage will sometimes cause the alarm to come on. This situation is self-correcting. If the pump is operating correctly, the wet well will automatically be pumped down and the alarm light will turn off.
- If the alarm light is still on after fifteen minutes you will need to contact a licensed plumber or the supplier of the pump to resolve the problem.
- Never attempt to open the tank cover to the electrical panel box.

What should I do if there is a power outage?

In order to prevent waste from backing up into the lowest sink, tub, or toilet in your home, severely limit the interior use of water until power is restored. This means do not shower, wash dishes, or wash clothes and limit flushing the toilet. While your holding tank has a limited capacity, if the system was already full and ready to pump just before the power went out, there will be even less storage available.

LIMIT WATER USE: Your grinder pump is powered by electricity and will not function during a power outage.

Protecting Your Grinder Pump

What can I do to protect my grinder pump?

A properly maintained grinder pump should be able to handle wastewater from the kitchen, bathroom, laundry, etc. However, some chemicals and substances can adversely impact a grinder pump and may cause safety hazards. Please check the labels on all chemicals before using or disposing. Never connect a sump pump to the grinder pump.

It is not advisable to plant flowers or shrubs or place such items as fences, decorative pilings, fish ponds, etc. within the immediate area as damage to the pump, underground electrical or piping systems may occur. Electrical power and alarm wires are buried under the ground between the control panel and the tank.

What should I do with my pump when I go on vacation?

If you plan on being away for several days, replace the wastewater in the tank with clean water to help minimize odors. First run water from an inside faucet long enough for the grinder pump to start working. After the pump starts, turn the inside faucet off. The pump will run until the tank is empty and shut off automatically. This process will cleanse the pump and leave the wet well filled with clean water.

LEAVE THE POWER ON: Always leave the power to the pump on. This allows the heating element inside the pump to operate which helps eliminate condensation and freezing.

Do's and Don'ts for Inside the House

There are a number of do's and don'ts that will help ensure a long life and minimal maintenance for your system. As a general rule, nothing should be disposed into any wastewater system that hasn't first been ingested, other than toilet tissue, mild detergents, and wash water. Here are some additional guidelines:

DON'T flush dangerous and damaging substances into your wastewater treatment system; specifically, do not flush:

- Pharmaceuticals
- Excessive amounts of bath or body oils
- Water softener backwash
- Flammable or toxic products
- Household cleaners, especially floor wax and rug cleaners
- Chlorine bleach, chlorides, and pool or spa products
- Pesticides, herbicides, or agricultural chemicals or fertilizers
- Degreasing solvents
- Flushable Wipes

DON'T use special additives that are touted to enhance the performance of your system. Additives can cause major damage to 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.

DON'T leave interior faucets on to protect water lines during cold spells. A running faucet can easily increase your wastewater flow by 1,000 to 3,000 gallons per day and hydraulically overload your system. Instead, properly insulate or heat your faucets and plumbing.

DON'T use excessive amounts of water. Using 50 gallons per person per day is typical.

DON'T ignore leaky plumbing fixtures; repair them. A leaky toilet can waste up to 2,000 gallons of water in a single day. Leaky plumbing fixtures increase your water bill, waste natural resources, and overload your system.

DON'T dig without knowing the location of your wastewater treatment system. As much as possible, plan all landscaping and permanent outdoor structures before installation. State law requires that utilities be notified before beginning excavation. Call your state One-Call center (811) before any digging is done.

Do's and Don'ts for Inside the House - Continued

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 treatment system and tanks from the holding tank or additives have been used. When dumped directly into the pumping vault, RV waste clogs or fouls equipment, causing undue maintenance and repair costs.

DON'T ever connect rain gutters or storm drains to the sewer or allow surface water to drain into it. Don't discharge hot tub water into your system. The additional water will increase costs and reduce the capacity of the collection and treatment systems. It can also wash excess solids through the tank.

Do's and Don'ts for Inside the House

DO use your trash can to dispose of substances that cause maintenance problems and/or increase the need for septage pumping. Dispose of the following with your trash:

- Flushable wipes
- Egg shells, cantaloupe seeds, gum, coffee grounds, tea bags, chewing tobacco, cigarette butts, seafood shells
- Paper towels, newspapers, sanitary napkins, diapers, kitty litter, candy wrappers
- Cooking grease
- Rags, large amounts of hair
- Dental floss
- Sanitary napkins, tampons or diapers and sanitary wipes such as baby wipes or disposable floor wipes
- Q-Tips
- Cat litter, aquarium rocks or gravel
- Glass, metal, wood
- Rubber gloves or other disposable gloves
- Fireplace ashes

DO collect grease in a container and dispose with your trash. Avoid using garbage disposals excessively. Compost scraps or dispose with your trash, also. Food byproducts accelerate the need for pumping and increase maintenance.

Water Use and System Care

DO conserve water:

- Take shorter showers. Be cautious about excessive use of larger soaking tubs
- Don't let water run unnecessarily while brushing teeth or washing hands, preparing food, washing dishes, etc.
- Wash dishes and clothes when you have a full load
- Use water saving devices on faucets and showerheads.

DO keep lint out of your wastewater treatment system by cleaning the line filters on your washing machine and dryer before every load. Installing a supplemental lint filter on your washing machine would be a good precautionary measure.

DO keep the tank access lid secure to the riser at all times. If bolts are lost or damaged, contact your local maintenance technician.

> **ELECTRICAL SAFETY NOTICE:** Only a qualified electrician or authorized installer/operator should work on your control panel. Before anyone does any work on either the wiring on the level control floats and pumps in the vault or on the control panel itself, it is imperative to first switch the isolation fuse/breaker and the circuit breaker in the panel to the 'Off' positions, then switch 'Off' the power to the system at the main breaker.

Outside the House

At the Control Panel

- **DO** familiarize yourself with the location of your wastewater system and control panel.
- **DO** take immediate action if an alarm activates. Contact your service company promptly; the alarm sounds similar to a smoke alarm.
- **DON'T** turn off the main circuit breaker to the wastewater system when going on vacation. If there is an infiltration or inflow into the system, the pump will need to be on to handle it.