

# GRINDER PUMP HOMEOWNERS GUIDE

The Barnes grinder station serving your home is part of a low-pressure wastewater system. Every day of the year a network of pipes carry wastewater to a pump station or wastewater treatment plant.

The grinder pump in your yard is an important part of the system. Your home is served by a low-pressure system, which uses a grinder pump to grind the wastewater from your home (much like a garbage disposal in a kitchen) and push the ground wastewater through small diameter plastic pipe to the larger pipe in the street. The grinder pump station is designed to handle routine, domestic sewage. Solid waste materials should be thrown in the trash.

Low-pressure wastewater systems are economical solutions for areas that cannot be served by traditional gravity lines. However, a grinder pump system does require the homeowner take a more active role than required for a property served by gravity sewer.

It is important that you know how your home sewer system operates and that you notify your local emergency dispatchers if a problem occurs. Our technicians provide maintenance and service; however, there may be service charges for pump repair and/or replacement.

Installed grinder pump stations may be placed in a utility Easement to provide access for maintenance and service. It is not advisable to plant flowers or shrubs or place such items as fences, decorative pilings, fish pond, etc. within close proximity to the grinder pump station as damage to the grinder pump station, underground electrical or piping systems may occur. The county/municipality will not be responsible for any damage to landscaping items placed in close proximity to the grinder pump stations while performing any maintenance function. Also, electrical power and alarm wires are buried under the ground between the control panel and the grinder station tank. Before digging in the area, call to have a technician locate the lines.

The grinder pump stations are provided with a small breather vent holes located on the side of the tank or cover. It is important to keep this vent open and free of debris, such as mulch or grass, for the unit to remain operational. It is also helpful to have the ground sloped away from the station so water will not pool and enter the vent rendering the unit inoperable.

With your cooperation, your low-pressure system will provide many years of safe, reliable service. Please take a few moments to read the following information to ensure the proper function of your pump.

## IF THE ALARM SOUNDS

If the fluid level in the station reaches the alarm level, an alarm horn and light located in the alarm box on the outside of your home will automatically turn on.

### You should...

- Limit water use to prevent overflows.
- Turn off the alarm by depressing the “silence” button on the side of the alarm box. The alarm horn will silence, but the light will remain on until the issue is remedied.
- Wait 15 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 15 minutes, call your service provider.
- Never attempt to open the tank cover or the electrical panel box.

### CAUTION:

Electrical shock or damage to the system may occur.

## PROTECT YOUR PUMP

The grinder pump can easily handle any wastewater that is normally discharged to the sewer from the kitchen, bathroom, or laundry. Some chemicals and materials may cause operating problems or safety hazards. It is advisable to check labels on chemicals prior to their disposal. Never connect a sump pump to the grinder pump station.

**CAUTION:** Never put any of the following materials into sinks, toilets, or drains - they may clog your system or create an unsafe environment:

- Glass, metal, wood, seafood shells, coffee grounds
- Paper, socks, rags, or cloth of any kind
- Tampons or sanitary napkins
- Plastic objects (toys, eating utensils, etc.)
- Any strong chemical, toxic, caustic, or poisonous substance
- Degreasing solvents
- Any explosive or flammable material
- Gasoline, kerosene, fuel oil, paint thinner
- Automotive antifreeze, lubricating oil or grease
- Cooking fat (lard, oil, grease)
- Kitty litter
- Baby wipes and products marked as “flushable”

## FAQ

**Alarm sounds when it rains:** The unit is a sealed system and should not have any infiltration. Contact the utilities department for further investigation.

**My neighbors alarm sound while they are away:** Call the numbers listed in the contact section.

**Odor is coming from the unit:** Under normal operation, no odor should be present. The unit may require flushing with clean water the equivalent of half a bathtub volume. If odor persists, call the numbers listed in the contact section.

## TECHNICAL DETAILS

A polypropylene wastewater holding tank has been installed underground on your property and a wastewater grinder pump is housed in the tank. The tank cover is round and is the only part that shows above the ground. All of the wastewater from your home flows into the buried tank. When the tank fills to a pre-set level, the grinder pump automatically turns on, grinds the waste, and forces it out of the tank and into the wastewater system.

The grinder pump normally will run for one minute or less and will automatically turn off when the tank has been 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 has entered the tank. During a usual day, the grinder pump will turn on and off to empty the tank 10 to 20 times.

The grinder pump is powered by electricity and is connected to the electric service lines usually at a panel box located near your electric meter on the outside wall of your home. However, some are located in a panel inside the home. Grinder pump electricity charges are estimated to be less than a couple dollars a month and are included in your monthly electric bill.

## IN CASE OF POWER FAILURE

If there is a power failure which affects your home, your grinder pump will also experience a loss of power and not be able to operate. The grinder pump tank has a holding capacity to help avoid alarm or high-level occurrences. Interior water usage should be limited until power has been restored.

Some units are equipped with a factory installed generator receptacle. This allows the pump to be operated in case of power failure. Follow the generator manufacturer’s instructions when connecting a generator to these style panels.

## WHILE ON VACATION OR EXTENDED LEAVE

If you will be away from your home for more than a week, the following steps should be taken to minimize the potential for the development of stagnating odors:

First, DO NOT shut off the power to the basin or your main power disconnect. The station should be energized at all times.

Run water from an inside tap long enough for the grinder pump to begin working (the equivalent of half a bath tub volume). The grinder pump will run until the tank is empty and will shut off. This process will cleanse the pump and leave it filled with a small amount of clean water. Dish washing detergent can also be added to the water. Always leave the electrical power to the basin turned on.

For an extended absence and non-use (greater than a few weeks), the above process should be followed two or more times to provide additional cleaning of the system. Another rule of thumb is to drain two bath tubs full of water. An 1/8th cup of liquid dish detergent (i.e. Dawn, Joy, Palmolive) can also be added with the water running to the drain to clean the interior of the basin while not in use. Powered detergents and industrial cleaners are not recommended for this and can damage the system.

Again, always leave the electrical power to the basin on while you are away. At both the alarm panel and interior circuit breaker.

By following these guidelines, you can ensure that your low pressure sewer system will provide many years of safe, reliable service.