

## **Homeowner's Guide to Grinder Pumps**

- **Operations**
- **Maintenance**
- **Repair**
- **Safety Precautions**
- **Emergencies**

### **Grinder Pumps Support Sewer Systems**

The low pressure sewage system servicing your home is part of the larger Polo Club collections system. Every day of the year several hundred feet of pipe carry sewage to the manhole at Canter and Lexington Street to be carried through the City's sewage system to its treatment facility.

### **Typical Grinder Pump Setup**

If you have a grinder pump, your home is one served by a pressure system, which uses a grinder pump to grind the sewage from your home (much like the garbage disposal in your kitchen) and push the sewage through small plastic pipes to the larger lines in the street.

It is important that you know how your home sewer system operates and that you know who to contact if a problem occurs. For those homes who have participated in the Polo Club Sewer LID Project. The actual grinder pump has an extended warranty of five (5) years after date of acceptance (June 6, 2005). Any repairs or warranty work after the June 6<sup>th</sup>, 2006 date will require you to contact the supplier of the pump, HD Fowler of Pasco, WA at (509) 545-0255, to resolve the problem.

It is not advisable to plant flowers or shrubs or place such items as fences, decorative pilings, fish ponds, etc. above your 2-inch sewer service line or adjacent to your basin as damage to the grinder pump, underground electrical or piping system may occur. The City will not be responsible for any damage to landscaping or items placed near your system while performing any warranty work.

Electrical power and alarm wires are buried under the ground between the control panel and the tank. Before digging in the area, it is advised to hand dig to locate the lines.

The grinder pump basins have a green lid with a vent on top. 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 tank so water can not pool and enter the vent rendering the unit inoperable.

If your home is new construction, outside of the Polo Club neighborhood and less than one year old, your grinder pump is still under warranty through your builder. Any problems you experience with the grinder pump system during that period should be referred to the builder or his representative.

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 insure the proper functioning of your pump.

## If the alarm sounds...

If there is a grinder pump failure, the tank which contains the pump will become too full. An alarm horn and light located in the alarm box on either the outside of your home or in your garage will automatically turn on. You should...

- Discontinue water use to prevent overflows.
- Turn off the alarm by depressing the alarm light on the front of the alarm box on some models and on others covering the "Touch to Silence" pad on the left side of the panel. The alarm horn should silence but the light will remain on until the grinder pump is repaired.
- 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, immediately stop all water usage in the house and call a plumber.
- For those homes who have participated in the Polo Club Sewer LID Project, the actual grinder pump has an extended warranty of five (5) years after date of acceptance (June 6, 2005). Any repairs or warranty work after the June 6<sup>th</sup>, 2006 date will require you to contact the supplier of the pump, HD Fowler of Pasco, WA at (509) 545-0255, to resolve the problem.

- 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 handle any wastewater 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.

**CAUTION:** Never put any of the following materials into sinks, toilets or drains:

- Glass, metal, wood, seafood shells
- Diapers, socks, rags or cloth of any kind
- 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 or antifreeze
- Lubricating oil or grease
- Cooking fat (lard, oil, grease)
- Hair clippings

These materials may clog your home system or create unsafe conditions in your lines and tank.

## **Nuts and Bolts: Technical Details**

A fiberglass or high density polyethylene sewage holding tank has been installed underground on your property and a sewage 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 preset level, the grinder pump automatically turns on, grinds the waste, forcing it out of the tank and into the sewage system.

The grinder pump will normally run for one or two minutes 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 55 gallons has entered the tank. During a usual day, the grinder pump will turn on and off to empty the tank 5 to 10 times.

Pump controls can be found typically in a panel box near your electric meter on the outside wall of your home. However, some are located on a panel inside the home. Settings in the panel can be used to adjust the pump on and off levels, and high/low alarm settings. Also, there may be a digital readout to display the number of cycles the pump

has been through and the current level in the tank.

## **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 certain amount of holding capacity, but interior water use should be limited until power has been restored.

## **While on Vacation**

If you are going to be away from home for more than seven days, the following steps should be taken to minimize any stagnating odors.

First, run water from an inside tap long enough for the grinder pump to begin working. After the pump turns on, turn the water off. 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 clean water.

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