# Grinder Pumps

**FAQs** for Homeowners



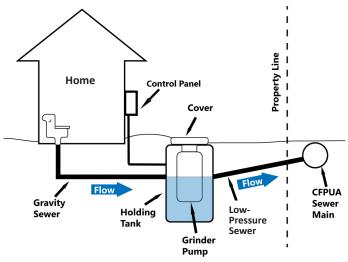


#### What is a grinder pump?

A grinder pump is a self-contained appliance that consists of a collection tank, a small pump, on-off controls, and a high-water alarm. The grinder pump system collects all the wastewater from a home, grinds it into a slurry, and pumps it through a small pipe to the sewer main in the street.

A grinder pump is a pumping system with many components – tank, pump assembly, level controls, piping, valves and electrical. A grinder pump will normally run for one to two minutes and automatically turn off when the wastewater in the tank pumps down to a preset level.

The pump is powered by electricity and is connected to a control panel mounted near the tank. The control panel is wired to an outside breaker box fed by a circuit breaker in the home's electrical panel. The grinder pump is not a septic system.



#### Why does my house have one?

Whenever possible, sewers are designed to use gravity to move wastewater from the home or business through the sewer system. Certain difficult terrain types make gravity sewers cost prohib-

itive or infeasible. In some cases, using a grinder pump is more practical for moving wastewater through a low-pressure sewer system.

#### How does it work?

A grinder pump is placed in a tank that is buried in a convenient outdoor location on your property. When water is used in the house, wastewater flows into the tank. When the wastewater in the tank reaches a preset level, the grinder pump automatically turns on, grinds the waste, and pumps it out of the tank via a pressure discharge line into the public sewer system.

#### What are my responsibilities?

As a homeowner, your primary responsibilities are described in your customer agreement. To summarize:

- Provide electricity to the pump,
- Protect your pump and underground lines,
- Notify CFPUA when the alarm goes off,
- Act responsibly during a power outage, and
- Provide access to the property for maintenance of the system.

#### How do I provide electricity to the pump?

The customer is responsible for paying for the electricity that powers the pump, keeping their home electrical system in proper repair, and allowing authorized CFPUA personnel or contractors to access a properly sized and maintained breaker box mounted outside the home near the pumping unit so that the electricity to the pump can be disconnected safely during maintenance.

#### How do I protect my underground lines?

It is not advisable to plant trees or large shrubs or place such items as fences, decorative pilings, fishponds, etc., within the immediate area as damage to the pump, underground electrical, or piping systems may occur. Electrical power and alarm wires are buried near the control panel and the tank. A 2-inch diameter plastic low-pressure pipe runs between the tank and the property line. Before digging in these areas, you should call 811 to have a technician locate the lines.

#### What do I do when I go on vacation?

If you will be away for more than a week, leave the power to the pump on and take the following steps before you leave:

- Run water from an inside tap long enough for the grinder pump to start working.
- When the pump starts, turn the water off.
- The grinder pump will run until the tank is empty and then shut off. This process will clean the pump and leave the tank holding a small amount of this rinse water and minimize odor.

#### What do I do during a power outage?

Your grinder pump cannot operate without electrical power. The grinder pump storage tank has a limited amount of storage capacity, so it is imperative to keep water usage to a minimum during a power outage. Minimizing water usage (bathing, flushing the toilet, washing dishes, etc.) during a power outage may prevent the sewer from backing up into your home.

Your holding tank has a 360 gallon capacity, but if the system was already full and ready to pump just before the power is lost, even less storage will be available.

CFPUA will provide a pump-out service for your grinder pump if power is out for 48 hours or longer if the property is accessible and roads are not blocked by down trees, power lines, etc.

Call the CFPUA 24-hour emergency line at (910) 332-6565 to request a pump-out service due to a power outage.

#### What do I do when the alarm goes off?

Your grinder pump includes a light and sound alarm that will activate when the pump has failed or there is high water in the tank. A pump may fail for several reasons, such as power supply breaker tripping, loss of power, force main break, or a sensor-related malfunction. If the pump fails, the tank will fill with wastewater. If this happens:

- Stop using water to prevent overflows.
- Using a lot of water at once can cause the alarm to sound. This situation corrects itself after about 15 minutes. If the pump is operating correctly, the wastewater will automatically be pumped down and the alarm will turn off.

If the alarm light is still on after 15 minutes, call the CFPUA 24-hour emergency line at (910) 332-6565 to request maintenance and a pump-out service.

If you see an alarm occurring at a neighbor's home, notify the neighbor or contact CFPUA directly to report the alarm. CFPUA crews will respond and resolve the issue.

# Who is responsible for routine grinder system maintenance?

Provided you meet your responsibilities described above, CFPUA crews will perform maintenance on the grinder system. This includes the

control panel, tank, pump, and the low-pressure pipe. CFPUA is not responsible for the plumbing lines inside the house. Repeated failure to meet these responsibilities will result in direct charges for maintenance due to negligence or disregard. Routine maintenance is covered by your bimonthly fees related to sewer service with a

grinder pump system.

#### **Protect your Pump**

## NEVER put these materials into sinks, toilets, or drains:

- O Cooking fat, lard, oil, or grease
- O Degreasing solvents
- Cigarette butts
- O Dental floss
- Sanitary napkins or tampons
- O Diapers
- Q-Tips and cotton balls
- Oisposable wipes
- Hair clippings
- O Cat litter
- Strong chemical, toxic, caustic, or poisonous substances
- Explosive or flammable materials
- Glass, metal, wood, eggshells, shells, coffee beans, aquarium rocks, or gravel
- Plastic
- O Disposable gloves
- Fireplace ashes

### What are the

costs?

In addition to normal CFPUA sewer rates, a fee will be added (per the current fee schedule) to your bill. This fee will be used for operation and maintenance of the grinder pump system.

The cost of

electricity to operate the grinder pump is currently estimated to be between \$20 and \$30 per year. It is the customer's responsibility to pay for this electricity.



Cape Fear Public Utility Authority 910-332-6550 www.CFPUA.org