



E / One In-Basement Grinder Pump



The Willow Ridge community utilizes the [Environment One Grinder Pump](#) pressurized sewer system.

Background: A grinder pump is a wastewater conveyance device for homes that are below plane of the County / [WSSC's](#) gravity-based sewer system. Wastewater from the home's household appliances (toilets, bathtubs, washing machines, etc.) and flows down through the plumbing to the basement where the Grinder Pump resides in a buried 90-gallon sealed fiberglass tank. Once this tank reaches 2/3rds full, the grinder pump turns on grinding the waste and ejects the wastewater out through the community's system to the County / WSSC System which runs along Route 28 Darnestown Road.

Maintenance and Support: These systems are usually maintenance free for 10 -20 years but eventually need maintenance or replacement. An alarm will sound if there are issues, please call Freemire immediately.

Freemire Associates

Availability -- 24-hour, 7 days a week

410-768-8500

Some other Grinder Pumps such as Liberty, Myers, Gould, Zoeller and others exist and are often marketed as a direct E/One replacements, but their specifications are not the same, so they are not at all compatible with the Willow Ridge Community's system. Hidden Ponds and other Communities also utilize the WSSC E/One System.

Make sure the grinder pump alarm switch is always on, so that it will sound if the grinder pump malfunctions. The switch is in your basement (there are two switches, one for the pump and one for the alarm... Both look like light switches, but are higher on the wall, near the ceiling.) If you're not sure where the switches are, contact Freemire. Brandon Stewart of WSSC (Washington Suburban Sanitary Commission) has been helpful in answering questions and resolving problems 301-642-1717 or at brandon.stewart@wsscwater.com.

If the grinder pump is turned off, or if the alarm sounds or electricity goes out and you continue to use water, sewage will eventually back up into your basement. The grinder pump alarm is located in the stairwell to your basement. If the alarm sounds, turn it off at the switch in your basement (see below) and stop using water. Call Freemire immediately.

The grinder pump runs on electricity, so during power outages, be very careful about water usage. As mentioned, there is a 90 Gallon tank so depending on the retaining level there is a 30 plus gallon room spare before a basement backup will occur. We strongly recommend stopping using all toilets, bathtubs, washing machines, etc until power is resumed.

A service contract for your existing grinder pump is available through Freemire. As of December 15, 2023, the estimated new E/One pump replacement is approximately \$3,739 plus tax.

Freemire Associates are not Plumbers, they are strictly Grinder Pump technicians. Plumbing companies like Stang, Mallick & Clarksburg are very much aware and work closely with WSSC, Freemire and the Community.

Availability -- 24 Hour, 7 Days a Week

Stang Plumbing

<https://www.stangplumbing.com>

Gaithersburg, MD 20879

Phone: (301) 926-1462

Mallick Plumbing

<https://www.mallickplumbing.com>

Gaithersburg, MD 20879

Phone: (301) 804-6759

Clarksburg Plumbing

<https://www.stangplumbing.com>

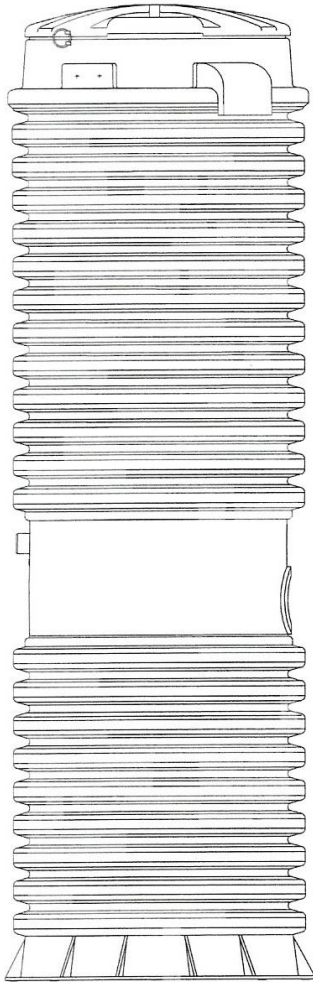
Clarksburg, MD 20871

Phone: (301) 865-2223

They are local and available during nights and weekends. We suggest you consider them for any of your Plumbing requirements.

If you suspect or plan to lose power, it is recommended to run water until you hear the E/One Grinder Pump cycle through, thus ensuring the holding Tank is as empty as possible. Thus, allowing a 30-gallon buffer before water usage trips the Grinder Pump's alarm to alert you to stop using any water & drainage usage.

User Instructions for the Environment One Grinder Pump



General Information

In order to provide you with suitable wastewater disposal, your home is served by a low pressure sewer system. The key element in this system is an Environment One grinder pump. The tank collects all solid materials and effluent from the house. The solid materials are then ground to a small size suitable for pumping as a slurry with the effluent water. The grinder pump generates sufficient pressure to pump this slurry from your home to the wastewater treatment receiving line and/or disposal plant.

Congratulations on your Environment One grinder pump investment. With proper care and by following a few guidelines, your grinder pump will give you years of dependable service.

Care and Use of your Grinder Pump

The Environment One grinder pump is capable of accepting and pumping a wide range of materials. Regulatory agencies advise that the following items should not be introduced into any sewer, either directly or through a kitchen waste disposal unit:

Glass	Diapers, socks, rags or cloth
Metal	Plastic objects (toys, utensils, etc.)
Seafood shells	Sanitary napkins or tampons
Goldfish stone	Kitty litter

In addition, you must **never** introduce into any sewer:

Explosives	Strong chemicals
Flammable material	Gasoline
Lubricating oil and/or grease	

Periods of Disuse

If your home or building is left unoccupied for longer than a couple of weeks, perform the following procedure:

Purge the System. Run clean water into the unit until the pump activates. Immediately turn off the water and allow the grinder pump to run until it shuts off automatically.

Duplex Units. Special attention must be taken to ensure that both pumps turn on when clean water is added to the tank.

Caution: Do not disconnect power to the unit

Power Failure

Your grinder pump cannot dispose of wastewater without electrical power. If electrical power service is interrupted, keep water usage to a minimum.

Pump Failure Alarm

Your Environment One grinder pump has been manufactured to produce an alarm signal (120 volt) in the event of a high water level in the basin. The installer must see that the alarm signal provided is connected to an audible and/or visual alarm in such a manner as to provide adequate warning to the user that service is required. During the interim prior to the arrival of an authorized service technician, water usage must be limited to the reserve capacity of the tank.

For service, please call your local distributor:

Freemire & Associates, Inc.
1215 Old Dorsey Road
Harmans, MD 21077
Bus. 410.768.8500 Fax 410.768.3400
Service Fax 443.883.8068
info@freemire.com

Grinder Pump Info & Trouble Shooting

If a loud Alarm sounds from your Basement, check the Grinder Pump. It has a dark **green** circular top (Approximately 27 inches round) and is imbedded in your basement cement floor

- Turn off the Alarm, a standard looking light switch that's mounted high on your wall near the bottom of your basement steps.
- **STOP** Toilet flushings and the use of water that will run down your drain.
- Look around Grinder Pump and Plumbing for any leaks
- If a water pipe is leaking call a Plumber or Stang Plumbing @ 240 614-2805
- If not a water pipe, immediately call Freemire Associates @ 410 768-8500
They have Day, Night, Weekend, around the clock service and the authorized Service provider for our area -- The System is damaged and needs repair.

Top cover View of Grinder Pump in basement floor



Frequently Asked Questions:

Odors coming from the grinder pump station?

- When operating normally, there should be no noticeable odors coming from the unit. If there are odors, the unit may need flushing. Run clean water down your kitchen, laundry or bathroom sink for about 10 minutes. If Odors persist, call Freemire Day or Night @ 410 768-8500 for Service!

You notice wet spots around the pumping unit or the discharge pipe?

- The pumping unit and discharge pipe are totally sealed. If you notice wet spots around the unit or pipe and there has not been any recent rain, call the phone number located on the back of this pamphlet.

The alarm keeps going off when it rains?

- It means rainwater may be getting into your system and over loading it. Contact your plumber to investigate.

The neighbor's alarm goes off and they are away?

- Call Freemire Associates at 410 768-8500 immediately and report the problem. Do not investigate the problem yourself.

There is a power failure?

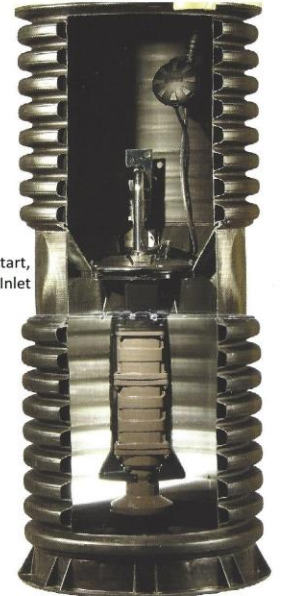
- If there is a power failure, **STOP** water use inside the home. The alarm may activate until the unit clears itself. If the alarm remains on for over an hour after the power has been restored, call Freemire Associates at 410 768-8500

Going on travel for extend time?

- Before you leave, run water until grinder pump cycles through. This way no stale water remains in the unit until your return.



Alarm & Power Switch



Artist rendition of Grinder Pump unit installed under basement floor

E One Grinder Pump Operational Information

Motor 1 hp, 1,725 rpm, high torque, capacitor start, thermally protected, 120/240V, 60 Hz, 1 phase Inlet Connections 4-inch PVC socket weld Discharge Connections Pump discharge terminates in 1.25-inch NPT female thread. Can easily be adapted to 1.25-inch PVC pipe or any other material required by local codes.

- 91 gallons (344 liters) of capacity
- On-slab or in-slab installation
- Designed specifically for indoor installation in the mechanical room of the home

Discharge Specifications

- 15 gpm at 0 psig
- 11 gpm at 40 psig
- 7.8 gpm at 80 psig

To avoid blockages and pump damage, the following items should not be put into any Sewer!



- Glass
- Metal
- Abrasive materials including gravel, sand, aquarium stone, and coffee grinds
- Seafood Shells & Egg Shells
- Socks, rags or cloths
- Plastic
- Sanitary napkins or tampons
- Disposable diapers



- Kitty litter
- Explosives
- Flammable materials
- Lubricating oil, grease, paint, large amounts of cooking oil
- Strong chemicals
- Gasoline or diesel
- Stormwater runoff
- Personal wipes (and other products marked "flushable")

Any disposable Feminine product or Personal Wipe item that is marked "FLUSHABLE" even by the manufacturer should never be flushed into your Sewer System!