# SILVER LAKE UTILITY DISTRICT PROPERTY OWNER'S GUIDE TO GRINDER PUMP SYSTEMS



The Silver Lake Utility District (SLUD) is providing this guide to help property owners become more familiar with your private grinder pump system.

## How does a grinder pump system work?

Grinder pump systems are used in areas where gravity service is not available. Wastewater normally flows downhill by gravity from a building's internal plumbing to a sewer lateral and into the public sewer line. The SLUD sewer system was designed and installed as a low-pressure system, and each property connected to the system has a private grinder pump system installed to move wastewater into the system. A grinder pump works like a garbage disposal – it grinds up wastewater from a home from toilets, sinks, showers, washing machines, etc., and pumps it



from a home from toilets, sinks, showers, washing machines, etc. and pumps it into the public sewer system.

Grinder pumps are placed in a tank that is buried in an outdoor location on a property. The tank provides storage for wastewater when water is used in the house. When wastewater levels reach a preset level, the grinder pump will turn on, grind the waste, and pump it out of the tank via a pressure discharge line into the public sewer system.

A grinder pump is a pumping system with many components, including a tank, pump assembly, level controls, piping and valves, and electrical. A grinder pump will normally run for one to two minutes and automatically turn off when the wastewater in the tank reaches the preset off level. The pump is powered by electricity and is connected to a control panel that is typically mounted on the side of a building or near the tank. The control panel is wired to a circuit breaker in the building's electrical panel.

# Who is responsible for system maintenance?

The Silver Lake Utility District does not own grinder pump systems and is not responsible for their maintenance. Property owners are responsible for operation, maintenance, repair, and replacement of the grinder pump system. This guide provides general information on how to care for your system, what to do in the event of failure or a power outage., and some safety tips.



# How to care for your grinder pump system.

#### Use water efficiently.

Average indoor water use in a typical single-family home in Wisconsin is approximately 51 gallons per person, according to a 2021 Home Water Use in the United States report by the National Environmental Education Foundation (NEEF). Dripping faucets and leaky toilets can waste hundreds to thousands of gallons of water each year. The more water that a household conserves, the less water that enters the grinder pump system.

## Flush responsibly.

Property owners should be careful with undesireable substances and items that could be flushed into the sewer. Fats, oils, grease or grit (FOGG), dental floss, feminine hygiene products, condoms, diapers, wipes (including those labeled as "flushable"), cotton swabs, cigarette butts, coffee grounds, cat litter, or other items that can cloq and potentially damage your grinder pump system should never be flushed. These items should be disposed of in your garbage.

Flushing household chemicals, gasoline, oil, pesticides, automotive fluids, and paint can present a safety hazard in the system. These items should be taken to the appropriate local hazardous materials handling or recycling center and disposed of in a safe and legal manner.

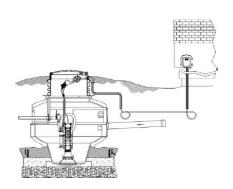
## Minimize use of garbage disposals.

Using a garbage disposal increases the amount of solids entering the holding tank of the grinder pump system. The more food waste that is sent to the holding tank, the more often the grinder pump needs to be activated to grind the content of the tank. The increased use of the grinder pump subsequently increases the frequency of required maintenance to the system. maintenance means higher costs of operation, as well as more frequent repairs and replacement of pumps.

# Keep excess rainwater out of the system.

Be aware of downspouts or storm drains that may flow in the direction of the grinder system. Additional water increases pumping frequency and costs, depletes the available capacity for wastewater, and adds needlessly to the daily volume of water that the wastewater treatment plant must process, increasing costs for all sewer system users.

Typical Residential Grinder Pump System







# Know your responsibilities.

#### Perform routine maintenance.

It is your responsibility to schedule routine inspection and maintenance of the system to ensure that it is operating efficiently and dependably. It is also your responsibility to maintain your home or building's plumbing free of defects or blockages, including the sewer lateral that extends from your building to the public sewer main.



Grinder pump lifespans can vary greatly based on a number of factors, including maintenance, usage, and the model/brand. The average grinder pump life can range between 8 and 15 years with proper maintenance, but some can fail much earlier or last much longer. Regular preventative maintenance is often skipped by property owners, and minor issues that are undetected or not addressed can lead to more serious issues or failure. In addition, how a pump is used and what goes down the drain can also impact lifespan.

#### Label your circuit breakers.

Know which circuit breakers in your house or building supplies power to your grinder pump, and label it so that you do not accidentally turn it off. It is your responsibility to provide electric power to the grinder pump system.



## Know the location of your service panel.

Be aware of the location of the electrical service control panel, but do not tamper with it. If a problem occurs, contact a qualified and reputable contractor.



## Know what to do in the event of a power failure.

Water should be used sparingly if there is a power failure. Storage capacity in the pump tank is limited and depends on your tank size. It is suggested that you have an understanding of your specific pump system's capacity to avoid sewer backups.



## Know what to do in the event of a grinder pump system failure.

In the event that a grinder system fails, an alarm will generally sound on the control box. During an alarm condition, please stop your water usage until repairs have been made or a qualified contractor has advised you that you may do so. It is also recommended that you disable any water treatment devices such as softeners or iron filters that may cycle and discharge water into your system. Continued discharge of water into a system in an alarm condition may result in backups and/or flooding in your home. Schedule repairs as soon as possible to avoid a backup situation.







# Safety First!

#### Call before you dig.

By law, everyone – including a homeowner working in their own yard – must contact Diggers Hotline at least three working days before digging. You can contact Diggers Hotline 24 hours a day/7 days a week by dialing 811 from any phone in Wisconsin, or you may dial 800-242-8511. You may also contact Diggers Hotline using the <u>DIY Portal</u>.

#### Do not tamper with your tank.

Do not attempt to enter your tank or remove the access lid. The septic environment creates gases that can cause illness or loss of consciousness. If your lid has been removed or damaged, contact a qualified contractor to repair it in a timely manner.

The Silver Lake Utility District Commission is seeking information on District customers' grinder pumps, including maintenance/repair activities and replacement.

This information will be used to help evaluate the efficiency of the system, as well as to provide feedback on expenses related to pump maintenance. Please take some time to complete the brief survey, answering to the best

of your ability. Scan the QR code

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visit: https://villageofsummitwi.gov/utility-districts/ to access the survey.

Thank you!





This information is provided to Silver Lake Utility District customers as a courtesy. If you have any questions or are uncertain about maintenance activities, please contact a licensed plumber.





