

GRINDER PUMP STANDING OPERATING PROCEDURE

1. Definitions and Conditions of Service:

A. Grinder System. A Grinder System is defined as a wastewater collection system that serves two or more properties discharging through a common low pressure pipe. Loudoun Water shall be responsible for emergency and scheduled maintenance of Grinder Systems.

B. Grinder Pump Service Connection. A Grinder Pump Service Connection includes the grinder pump, the control panel, and the cable interconnecting the pump to the panel and serves the primary structure on a property. Only one Grinder Pump Service Connection per property is permitted to connect to a Grinder System. Additional structures on a single property must have separate grinder pump or gravity laterals that are the responsibility of the Resident User and that deliver sewage to the pump chamber for the Grinder Pump Service Connection. All grinder pumps, pump chambers, control panels, interconnecting cables, and service laterals are owned by the Resident User. Loudoun Water maintains, but does not own, the grinder pump, the control panel, and the cable interconnecting the pump to the panel.

Preventive maintenance of all grinder pumps and laterals on a premise shall be the responsibility of the Resident User. Emergency and scheduled maintenance of the Grinder Pump Service Connection (excluding customers' lateral) will be the responsibility of Loudoun Water. Applicable fees will be collected with the availability fee initiating a Grinder Pump Service Connection to offset repairs and replacement of parts.

C. Resident User. A Resident User is defined as the person(s) registered as a sewer customer of Loudoun Water and responsible for payment of invoices rendered for said service.

D. Individual Grinder. A private Individual Grinder is defined as serving one property, discharging to a gravity lateral or gravity collection system, and includes the pump, lateral, and appurtenances. Resident Users are responsible to secure VDOT permits for any private low pressure laterals crossing the VDOT right-of-way. Such permit shall state that the User will own and maintain the pressure lateral within the right-of-way. Maintenance of private Individual Grinders shall be the responsibility of the Resident User. Therefore, no additional

fees will be collected by Loudoun Water. If emergency repairs are performed, Loudoun Water shall be reimbursed for all labor and material expenses.

E. Commercial/Industrial/Institutional Grinders. Loudoun Water does not own or maintain grinder pumps and/or grinder systems associated with commercial, industrial, and institutional applications.

2. Installations to Meet Loudoun Water Intent and Policy Standards:

A. Proposed sewer systems must adhere to the Loudoun Water Master Plan. Gravity collection in combination with regional pumping stations identified in the Master Plan, Area Facilities Plan, or the Loudoun County General Plan must be used where feasible.

B. As compared to collection by gravity, Grinder Systems are less reliable, pose greater risks to health, and require substantially more emergency and scheduled maintenance. The intent of this SOP is to reinforce the objective of using Grinder Systems only when gravity collectors and/or conventional, regional pumping stations are not feasible.

C. Except in response to a resolution by the Board of Supervisors, Loudoun Water shall not accept ownership, maintenance or operation of any Grinder System which does not meet the provisions herein.

D. Grinder Systems shall not be used to avoid placing collectors at appropriate depths to serve upstream areas within the sanitary sewer shed or sub-shed.

E. In occasional, isolated instances the Authority, at its sole discretion, may determine that the installation of gravity collectors or conventional pumping is not feasible. In such cases, Individual Grinders or Grinder Systems may be permitted.

F. Sewage ejectors serving a basement will not be considered as part of, or compatible with, a Grinder System and shall be the full responsibility of the Resident User. As such, operation and maintenance of ejectors shall be the sole responsibility of the Resident User.

3. Design Approval Required:

A. Before agreeing to allow any Grinder System or Individual Grinders, Loudoun Water shall review and approve the construction design and details applicable to that system. Loudoun Water review and approval shall be in

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addition to any review, approval or standards which may be adopted and enforced by county, state and federal regulatory authorities.

B. Loudoun Water's design standards shall require Grinder Systems and Grinder Pump Service Connections to be of a standard configuration, capable of being compatible when connected to Loudoun Water sewerage system. Loudoun Water's Approved Product List specifies pump type/model permitted for Grinder Pump Service Connections.

C. The design of any Grinder System shall make acceptable provision for necessary easements and maintenance access to all portions of the Grinder System, the Grinder Pump Service Connection, and any planned extensions. The Grinder System shall be conveyed, along with all necessary easements and manufacturers' warranties, by general deed with title satisfactory to Loudoun Water.

4. Financial Considerations:

A. Grinder Systems, Grinder Pump Service Connections, and Individual Grinders shall be constructed at no cost to Loudoun Water and in accordance with construction and design criteria approved by Loudoun Water and appropriate regulatory agencies.

B. Grinder Systems with Grinder Pump Service Connections represent a unique circumstance for sewer service. As such, Developer Agreements shall include the following paragraph.

(1) **Grinder System:** Developer requested, and the Authority approves, a Grinder System in lieu of gravity collectors and conventional, regional pumping stations. Lots { list of lots } shall be served by a Grinder System. The Grinder System shall adhere to Loudoun Water's Grinder Pump Standing Operating Procedure (SOP) in effect at time of full execution of this Agreement. The availability fee associated with service to each of the listed lots will include an additional fee of \$7,500.00 to address pump replacement, maintenance, and repairs for each Grinder Pump Service Connection (excluding customer's laterals). Fee to be paid prior to issuance of Sewer Service Permit.

C. Maintenance of Individual Grinders shall be the responsibility of the Resident User, and, therefore, no additional fees will be collected by Loudoun Water. If emergency repairs are performed, Loudoun Water shall be reimbursed for all labor and material expenses.

5. Notice Provision and Covenants:

For lots associated with Grinder Systems, the Developer shall cause to be recorded on the official record plat for the subdivision or development, the following two notices:

- The property is served by a Grinder Pump Service Connection and the Resident User, the person(s) registered as a sewer customer and responsible for payment of said service, must perform all preventive maintenance. Emergency and scheduled maintenance of the Grinder Pump Service Connection, excluding customers' lateral, will be the responsibility of Loudoun Water in accordance with the Loudoun Water Grinder Pump SOP.
- Extraneous flows, such as from sump pumps, are prohibited. Resident Users may not flush unauthorized products or materials deleterious to the Grinder System. Such products and materials are defined in Loudoun Water's Grinder Pump Brochure as provided to each property connected to a Grinder System.

Covenants for Grinder Systems and Grinder Pump Service Connections include:

A. Should the Grinder System be compromised by unauthorized products as detailed in the Grinder Pump Brochure, Loudoun Water will maintain/repair the Grinder System and will issue a warning notice to the Resident User. Upon second and subsequent occurrences, Loudoun Water will charge the Resident User a fee in accordance with Loudoun Water policies.

B. Loudoun Water offers maintenance for, but does not own, the components associated with the Grinder Pump Service Connection. Therefore, Loudoun Water is not responsible for any property damage which may result from failure of any Grinder Pump Service Connection component.