

Division of Wastewater – Policies and Procedures Manual	
Standard Policies and Procedures	
Policy Number – AUB-02-06	Revision Number: 5
Subject Grinder Pump Installation	Effective Date: 7/1/13
	Superintendent Approval:
	General Manager Approval:

1.0 PURPOSE AND SCOPE

The purpose of this policy is to outline the installation requirements of single dwelling grinder pump pressure systems. This policy applies to all existing and future wastewater accounts serviced by Athens Utilities Board (AUB).

2.0 REFERENCES

AUB Wastewater Division Policy AUB-02-05, Wastewater Tap Policy and Fee; AUB Wastewater Division Policy AUB-02-01, Prohibitions and Limitations on Wastewater Discharges; Title 18, Athens Municipal Code, Water and Sewers.

3.0 GENERAL

MULTIPLE

The local control authority shall approve any grinder pump pressure wastewater system prior to design and installation of the system. Multiple grinder pump manufacturers are acceptable; however, AUB will only stock E-One equipment for repair and maintenance purposes, allowing expedient service. Equipment from other manufacturers will be ordered as needed and service will be delayed based on delivery schedules.

Grinder pump assemblies shall be purchased as a unit. The grinder pump unit shall include a basin, a grinder pump, an inlet, a discharge assembly and a UL-approved control panel. The system shall also include a manufacturer’s installation guide and operation and maintenance manuals.

The grinder pump station should be installed as close as possible to the facility to be served yet allow adequate space for access and maintenance. The grinder pump station and associated controls and valves must be accessible to AUB personnel at all times. A site that minimizes the chances of physical damage to the grinder pump station should also be considered when selecting the location. Prior to installation of any unit, the customer or the customer’s contractor (in new developments) shall coordinate all installation activities and schedules with AUB. All grinder pump installations must include a cleanout located between the grinder pump and the building being served, as shown in AUB’s grinder pump installation specifications.

4.0 DEFINITIONS

AUB – the Athens Utilities Board, and its duly authorized employees, agents, and representatives **Board** – the Chairman and all Commissioners but does not include any employees

Local Control Authority – Superintendent of Water and Wastewater or duly authorized representative
Customer – any person discharging waste to AUB’s Wastewater Collection System and wastewater treatment facilities

5.0 POLICY/PROCEDURES

5.1 Grinder Pump System Installation

AUB will install the grinder pump assembly, the piping from the grinder pump to the wastewater collection main and a control cabinet, including wiring from the control cabinet to the grinder pump. The customer shall furnish and install the piping from the house gravity wastewater to the grinder pump basin assembly. A cleanout must be installed between the grinder pump and the building being served. The customer must provide electric service to the control panel. The customer may choose to install the grinder pump assembly themselves. All installations will be made in accordance with the current AUB specifications.

The 240-volt, 30-amp electrical service to the grinder pump station must be installed in accordance with all applicable codes. A lockable electrical disconnect switch must be installed before the control panel. The electrical disconnect switch is to be mounted within sight of the grinder pump station. All installations must be in accordance with current AUB specifications and policies, as well as enforceable building codes.

The customer shall coordinate and pay for electrical inspections. The customer shall pay the cost of the electrical power necessary to operate the system.

The control panel installation must be in accordance with local electrical codes and pass an electrical inspection by the local control authority. The manufacturer shall furnish a schematic diagram of the control panel. The control panel shall include an alarm light and an audible alarm.

Inlet connections shall be made according to the manufacturer specification. These connections must also be approved by AUB. Discharge piping will be installed and located according to AUB specifications. The specifications will be determined by AUB to meet each site requirement. AUB will require a check valve and a shut-off valve to be installed on each outlet pipe. The valves will be located at the property line and installed in an AUB approved valve vault.

AUB shall conduct an inspection of the work (reasonable advance notice required) prior to and during installation if not installed by AUB personnel. The inspection shall include installation and operation of the unit (excluding electrical service) after primary power is established.

The grinder pump system may be placed in service once it has passed AUB's inspection. The grinder pump will not be placed into the basin until all construction activities are complete if the assembly is in a new development. AUB shall assume maintenance of all equipment associated with the grinder pump assembly excluding wiring and disconnect to the control panel.

The customer shall not alter, modify or tamper with equipment that AUB maintains.

Any alterations or relocation of components for the customer's benefit must be approved by AUB. Approved alterations or relocations will be performed at the customer's expense.

The customer shall not construct any structure or other permanent improvement that shall prevent AUB from maintaining the system.

The customer shall grant AUB a right of way and unencumbered access to enter upon the customer's property to maintain the grinder pump system.

5.2 Proper Use

The customer shall reimburse AUB for the cost of materials, labor and equipment required to repair any components of the system damaged by the customer's negligence or actions. Specifically, AUB will require a customer to pay for damage to a grinder pump system caused by non-compliance with AUB Wastewater Division Policy AUB-02-01, Prohibitions and Limitations on Wastewater Discharges. AUB will also require a customer to pay for damages caused by allowing the following materials to enter a grinder pump system:

- Glass, metal, wood, seafood shells.
- Diapers, socks, rags, or cloth of any kind.
- Feminine hygiene products or needles.
- Plastic objects (toys, eating utensils, etc.)
- Toxic or corrosive chemicals, solvents or degreasing chemicals.
- Gasoline, kerosene, fuel-oil, paint thinner.
- Antifreeze, lubricating oil, or grease.
- Cooking fat (lard, oil, grease)
- Cat litter, aquarium gravel.

5.3 Alarm Conditions

A grinder pump system is equipped with an audible alarm and alarm light that are activated when problems with the system occur. A customer should respond as follows:

- Immediately discontinue water use to prevent overflows and sewage backups into your home or yard.
- Call AUB at (423) 745-4501 and report the problem.

5.4 When Customer Is Away

If a customer will be away from home for several days, these steps should be followed to minimize the opportunity for problems:

- Replace the wastewater in the tank with clean water to minimize odors. To do this, run water from an inside faucet long enough for the grinder pump to begin running (someone will need to go outside and listen to verify the pump is running).
- After the pump starts, turn the inside faucet off. The pump will run until the tank is nearly empty and will shut off. This process will cleanse the pump and pipes and leave the tank holding a minimum amount of clean water.

5.5 Power Failures

During power failures, the grinder pump system will not be able to operate. The tank has some holding capacity, but water use must be severely restricted until power has been restored.