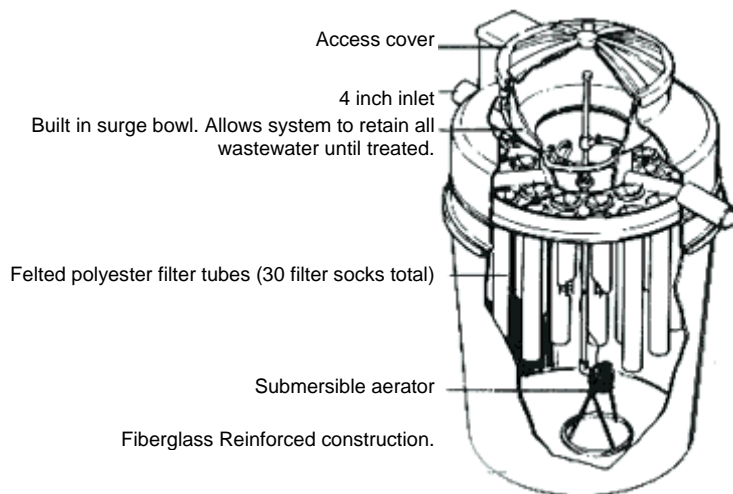


KNOW THE FACTS!

HOME AERATION UNITS – MULTI-FLO

Illustration of your Unit

You currently live in an unsewered area of Hamilton County. The waste from your house is treated by a home aeration unit. These units come in many shapes and sizes. They are sometimes referred to as “cavitettes.” Cavitette is the brand name of one aeration unit used in our county. The other brands used are: Coate Aer, Jet, Multi-Flo, Norweco, and Oldham. Although aeration units have different brand names, the principle of operation is basically the same; air injected into sewage provides agitation and oxygen which allows bacteria to reduce organic waste to carbon dioxide and water.



Managing your Unit

Sewage tank pumpers must be registered with the Health District. The principle purpose of tank pumping is to remove sludge. You may want to be present at the time of pumping to insure all sludge and wastewater is removed. Contracted repairs must be performed by registered professionals. To receive a list of registered pumpers and contractors call the Health District at 513/946-7800.

Treatment Process

A properly operating home aeration unit will produce a clear, odorless effluent. The following process is used.

Primary

(Pre-Treatment/Settling) There is no separate pretreatment chamber in the Multi-Flo system. Aeration, clarification and filtration are completed in one tank.

Aeration

Raw sewage from your home flows directly to the aeration chamber. There injected air from the Multi-Flo aerator provides agitation and oxygen to aerobic bacteria, which reduces organic matter in the wastewater.

Multi-Flo Aerator

The Multi-Flo aerator is a submersible aerator that sits at the bottom of the tank. The Multi-Flo aeration unit runs continuously 24 hours a day. The aerator is 1/6 HP 1550 RPM motor with thermal overload protection 120 Volt AC 60Hz, 2.6 amps. The Multi-Flo aerator is built with a thermal overload switch. If the motor gets too warm, the thermal switch will turn the motor off before permanent damage occurs.

Clarification/Filtration

During clarification fine suspended particles are removed from the aerated sewage. In the Multi-Flo this is accomplished using an array of fabric filter tubes. Suspended particles collect on the upstream side of the filter tubes and face back into the mixing (aeration) zone of the chamber. Clear effluent discharges from a weir which collects the filtered water.

Disinfection

Chlorine tablets stored in one or two tubes in a separate container, provide disinfection for units fitted with a chlorinator.

KNOW THE FACTS!

HOME AERATION UNITS-MULIT-FLO (cont.)

Basic Operation and Maintenance

START UP: Allow 6 to 8 weeks for sufficient bacteria to provide proper treatment in the multi-flo system. During this period, there may be sudsing from laundry waste. Sudsing can be reduced two ways: By limiting the volume of laundry washed daily and by using low-sudsing detergent. Spread laundry washings out to prevent short term overloads in the multi-flo system.

PUMPING EXCESS SOLIDS*: Periodic pumping is necessary to remove excess bacteria and other solids.

PUMPING FREQUENCY*: The rate of solids accumulation- and resultant pumping- is dependent upon the quantity and strength of waste water entering the system. Normally, residential system should be pumped every 2-4 years.

FILTER CLEANING*: Filter socks should be cleaned whenever a Multi-Flo unit is pumped. Filters may need to be laundered if the aerator is shut off for extended periods or they are plugged by grease, soap, residue or solids.

CLEANING FREQUENCY*: Under ordinary conditions, the top of the hanger and weir should be cleaned during each routine inspection (every 6 months). Sludge should be removed from the interior of the filters whenever it exceeds 6 inches in depth or if clumps of floc float at the top of the filter.

AERATOR REPLACEMENT: Average life expectancy of the aerator is 3-4 years. Never operate the aerator when the tank is empty.

ALARM: Multi-Flo alarm systems indicate both aerator failure and filtering plugging.

***NOTE: Due to differences in wastewater strength, increased user abuse, and hydraulic surges, additional treatment facility and/or increased maintenance may be required.**

Care of your Unit

Your Multi-Flo is a 500 or 1000 gallon per day treatment plant. Read the manual for your Multi-Flo system. To receive a copy contact:

Waste Treatment Systems, Inc.
1336 Stanley Avenue, Franklin, Ohio
45005

*For more information, please contact
the Water Quality Division at
513.946.7966, or visit*

www.hamiltoncountyhealth.org



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