

# KNOW THE FACTS!

## SEPTIC SYSTEMS - ADVANTEX AX20 TREATMENT SYSTEM

### About Your Sewage Treatment System

An Advantex AX20 sewage treatment system is manufactured by Orenco Systems, Inc. This treatment system is utilized as either a pretreatment unit prior to a secondary treatment soil absorption system (ex. modified mound, pressurized leach bed, a leach lines) or a disinfection device with direct effluent discharge.

### Treatment Process

#### *Primary Treatment (Processing Tank/Dosing Septic Tank)*

Raw wastewater from the building sewer flows into the processing tank. Here, heavy matter sinks to the bottom while fats, oils and greases float to the surface. A partially treated “clear” layer separates in the middle of the tank. It is this “clear” liquid that flows into the second compartment of the processing tank for further treatment. Located within the second compartment of the processing tank is a screen vault filter that further filters the effluent. An effluent pump is located downstream of the filter that lifts the filtered effluent through the distribution piping located on top of AX20 filter media.

#### *Secondary Treatment (AX20 Filter Pod)*

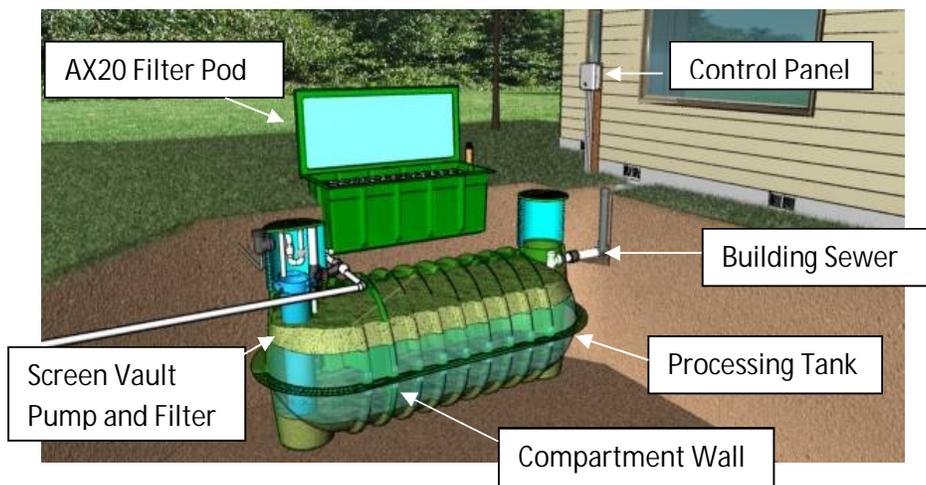
The main function of the AX20 Filter Pod is to treat the effluent from the processing tank. Effluent within the processing tank’s screen vault filter is pumped through a distribution manifold where the effluent is evenly applied over AX20 filter media. The wastewater slowly percolates through the filter media and is either returned to the processing tank via a Recirculating Splitter Valve (RSV), or directed to the discharge pump basin, depending on the liquid level within the processing tank. The filter media promotes the growth of naturally occurring beneficial bacteria that remove nutrients, organics, pathogens and other pollutants from the wastewater. The final product of the treatment process through the AX20 Filter Pod should be a clear and odorless effluent.

#### *Discharge/Pump Basin*

The pump basin is used to pump the treated effluent to either a secondary treatment device or an approved discharge point. The pump basin is typically a two-foot diameter basin which houses a pump. This basin may also contain an Ultraviolet Disinfection (UV) unit. The UV unit disinfects wastewater by destroying genes thereby preventing pathogen replication.

#### *Control Panel*

The control panel is always mounted outside, typically on the home or other building. The control panel monitors and operates all the functions of the sewage treatment system. It contains both audible and visual alarms that will help notify the user of problems with the system. The control panel contains telemetry which notifies your service provider when problems arise with the system.



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Advantex AX20

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## Care of Your System

Your Advantex AX20 system requires routine maintenance. Systems installed on or after January 1, 2005 are required to be monitored and serviced under contract by a Registered Maintenance, Monitoring and Service Provider (RMMSPP). Companies with this type of registration have received specialized training and have been authorized by the system manufacturer to work on the AX20 system. Owners of AX20 systems installed before January 1, 2005 may choose to have any Registered Service Provider (RSP) work on their system. Companies registered as ordinary Service Providers may not have specialized training and have not been authorized by the system manufacturer to work on the AX20 system. Generally, the following need to be addressed as routine maintenance:

*Lids* - All of the lids on your system must be accessible and extend 4-6 inches above grade. Check lids for cracks that allow surface water to enter the system. Cracked/broken lids also pose safety hazards for people and animals. Lids that cannot be moved without cracking or falling apart must be replaced.

*Processing tank* - Your service provider will determine if your processing tank needs to be pumped and cleaned. They will also determine if the screen vault filter located in the second compartment needs to be cleaned. They will check for proper operation of the floats, pump and RSV valve.

*Advantex AX20 filter pod* - Your service provider will determine if the AX20 filter needs maintenance. Maintenance within the AX20 filter pod usually involves removal of growth on the filter media and flushing the laterals within the filter.

*Discharge Pump Basin* - Your service provider will check the discharge pump for proper operation. They will also check the UV unit to ensure it is clean and operating as designed.

*Control Panel* - Your service provider will check the control panel for proper operation. They may adjust timer settings based on your water usage in order to maximum treatment and minimize maintenance needed.

### *Avoid These Items:*

Do not put any of the following items down your drain or in your sewage treatment system. They will cause serious damage to the system's biological process and equipment.

1. Plastic, sanitary products, scouring pads, condoms, mop strings, "disposable" diapers, towels, lint, rags, etc. These items will collect in your plant and require more frequent pumping.
2. Paints, paint thinner, chemicals, grease, solvents, and sanitizer. These kill the good bacteria in your plant.
3. Heavy plumbing cleaners and toilet tank tablets that will kill off the good bacteria in your plant.
4. Don't use concentrated detergents or detergents that contain phosphates.

*For more information, call the  
Water Quality Division at  
513.946.7800 or visit*

[www.hamiltoncountyhealth.org](http://www.hamiltoncountyhealth.org)



**HAMILTON COUNTY  
PUBLIC HEALTH**

PREVENT. PROMOTE. PROTECT.

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