



Pennsylvania Department of Environmental Protection

Rachel Carson State Office Building
P.O. Box 8774
Harrisburg, PA 17105-8774
November 3, 2003

**Bureau of Water Supply
and Wastewater Management**

To All Sewage Enforcement Officers:

The purpose of this letter is to inform you of a new experimental onlot treatment technology that is expected to undergo field-testing in Pennsylvania beginning in the spring of 2004, and to provide you with the opportunity to identify representative field test sites.

The technology is a recirculating non-woven textile filter manufactured by Orenco Systems, Incorporated located in Sutherlin, Oregon. The AdvanTex® AX20 unit has successfully completed ANSI/NSF Standard 40 testing for Class 1 residential wastewater treatment systems. This testing has demonstrated that the technology is capable of producing an effluent exceeding secondary treatment standards and reducing total nitrogen by about 65 percent. Additional information is available on the Orenco website at the following address: http://www.orenco.com/ots/ots_adv_index.asp.

We plan to test the technology at two sites within each of the six DEP regions (a total of 12 installations). An attempt will be made to identify sites that are representative of the extremes where the technology may be utilized. The criteria for identifying such sites will include but not be limited to the following: homes with and without garbage grinders; homes with and without water conservation devices; homes connected to a public water supply and others connected to an onlot water supply; and homes with varying number/age of family members. Water softener backwash will not be allowed to pass through the treatment unit.

Both new and repair systems will be considered as possible test sites, but must be permitted and ready for installation by spring 2004. Nitrogen-sensitive sites and those with shallow soils will provide the best opportunity for use of the technology.

The cost of the AdvanTex® AX20 treatment system is \$7,500 and installation normally costs about \$3,000 to \$7,000 depending on site limitations. This price includes all the components of the treatment system. It does not include the sewer piping between the house, tank and disposal area, ventilation piping, electrical conduit and fittings, and the absorption area or spray field. For the purpose of this test, Orenco will discount the cost of the system by \$2,000 to encourage homeowner participation. Low interest loans (1 percent) are available from PENNVEST to finance the remainder of repair projects. Further information on PENNVEST funding is available on their website at <http://www.pennvest.state.pa.us/pennvest/lib/pennvest/onlot2000.pdf>.



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A representative of the National Sanitation Foundation International will collect influent and effluent samples monthly for about one year at each site. Homeowners will be required to allow access for sample collection, and agree to log events that may stress the technology such as clothes washing and extended vacations. Homeowners must also agree to eliminate the use of products and disposal practices identified by the vendor as harmful to the treatment system (e.g. certain household cleaning products, pesticides, recreational vehicle wastes, etc.).

Please contact Tom Franklin with DEP's Innovative Technology Section at 717-787-3481 with information on possible test sites. Acceptable sites will be selected on a first-come, first-served basis.

Sincerely,

A handwritten signature in black ink that reads "Milt Lauch". The signature is written in a cursive style with a large, looping "L" and "C".

Milt Lauch
Chief

Division of Wastewater Management