

Missouri Department of Health and Senior Services

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Governor

Paula F. Nickelson Acting Director

Informational Release Number OWP 22-01

TO:

Local Public Health Agencies and other local Onsite Wastewater Agencies

Local Environmental Public Health Specialists DHSS Public Health Environmental Specialists

THROUGH: Dustin Johnson, Chief

Bureau of Environmental Health Services

FROM:

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Onsite Wastewater Program

SUBJECT: Approval of the Advanced Enviro-Septic Systems

DATE:

November 22, 2022

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The Department of Health and Senior Services (DHSS), Onsite Wastewater Program has worked with Presby Environmental Inc. (PEI), Infiltrator Water Technologies (IWT), and thirdparty inspectors to complete the Advanced Enviro-Septic system (AES) experimental protocol for treatment and disposal of wastewater. This process took longer than expected as a result of changes to the system design and the merging of PEI and IWT. As of the date of this informational release; the experimental status has been lifted and AES is now authorized by DHSS to be another option for the design of an onsite wastewater treatment system (OWTS). All designs and installations must meet the requirements of the September 2022 edition of the AES Design and Installation Manual for Missouri (D&I Manual 2022).

When utilizing AES, it is important to verify the installer and designer have completed the required training as is required by PEI/IWT. Upon completion of this PEI/IWT-provided training, the individual should receive a certificate they can provide to the permitting authority as proof they are qualified to install AES in Missouri. It is recommended that all permitting authorities take the online training as well to become familiar with the product and design requirements. Additional training is being developed and will be available in the near future. In addition, the D&I Manual 2022 states installation of shall be installed only by a DHSS registered advanced installer.

AES provides combined treatment and dispersal of wastewater that has received primary treatment in a septic tank. Based on a soil morphology evaluation, engineering is required for OWTSs when unsuitable factors are described and are uncorrectable, per 19 CSR 20-

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3.060(7)(K) and (L). Such unsuitable characteristics include, but are not limited to, bedrock described less than 36 inches deep, high shrink-swell clay less than 24 inches deep, a restrictive horizon less than 24 inches deep, or a seasonal high water table described less than 24 inches deep. Minimum AES sand bed sizing is determined based on soil loading rates assigned by the Registered Onsite Soil Evaluator and using the lowest assigned load rate between the soil surface and one (1) foot below the AES system sand fill.

DHSS approval of the AES is not to be construed that the product will work on all sites, regardless of site and soil characteristics. However, AES may be approved by local administrative authorities as part of an OWTS when the proposed system design complies with the D&I Manual 2022, the requirements of the state minimum construction standards and/or local standards, which can be more stringent. DHSS does not endorse any brand or specific product model.

Additional Resources:

- General Resource Center https://www.infiltratorwater.com/products/presby-environmental/advanced-enviro-septic/
- Manual 2022 and Calculation Tool https://www.infiltratorwater.com/locations/missouri/