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TO: Local Public Health Administrators
Local Environmental Public Health Specialists
DHSS Environmental Public Health Specialists
Onsite Wastewater Agencies

THROUGH: Mark Jenkerson, Bureau of Environmental Health Services Chief

FROM: James Gaughan, P.E.
Onsite Wastewater Treatment Program

SUBJECT: Experimental Protocol for the Aero-Stream Remediation system

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The Department of Health and Senior Services, Onsite Wastewater Treatment Program has reviewed and accepted the proposed innovative/experimental system protocol for the Aero-Stream Remediation system. A copy of the experimental protocol is available from the Onsite Wastewater Treatment Program. The Aero-Stream Remediation system is described as a sintered diffuser deployed in an existing septic tank with a coir fiber filament brush to facilitate attached growth bacteria; the diffuser is connected to an air pump. The stated purpose of the system is to restore the hydraulic capacity of a malfunctioning absorption system that is experiencing end-stage characteristics of ponding at the ground surface or is backing up into the home. Of a total of 20 Aero-Stream Remediation systems to be installed under the protocol, ten systems will be monitored and evaluated using the proposed protocol. Following are general guidelines for considering proposed Aero-Stream Remediation systems under the protocol.

Onsite wastewater systems that are the subject of a Notice of Violation are not considered for evaluation under this experimental protocol. An application to modify an existing onsite wastewater treatment system must be submitted to the local onsite wastewater authority for review. The sewage tank where the system would be installed must comply with the minimum requirements of state and local regulations. If the existing onsite system was designed by a professional engineer, the engineer should be consulted about the proposed system modification. A DHSS registered onsite wastewater treatment system installer must install the systems in compliance with applicable state and local standards and must follow the manufacturer's recommended installation procedures.

System owners must complete the acknowledgement portion of the Maintenance Inspection form. The proposed monitoring specifies that evaluated systems will be inspected after one day, about two weeks, and three, six and twelve months. After the evaluation of at least ten systems is completed, a summary report will be submitted to the Onsite Wastewater Treatment Program. The report will include the completed system monitoring data showing source water and tank pH; dissolved oxygen; odor; sewage level in the tank; the extent of, or reduction in, surface ponding; and any evidence of back-ups caused by hydraulic malfunction. In addition, any potential warranty issues for systems under this protocol are to be reported to the program.

DHSS does not endorse any brand or specific product model. However, provided the remediation system's operation is consistent with Missouri Statutes and the minimum state standards or local standards, system installation may be approved by local administrative authorities. Approval may be discontinued at any time, if warranted by subsequent field experience with installed systems.