

STATE OF DELAWARE DEPARTMENT OF NATURAL RESOURCES & ENVIRONMENTAL CONTROL DIVISION OF WATER RESOURCES 20653 DUPONT BLVD

UNIT 5
GEORGETOWN, DE 19947

March 3, 2015

Jessica Kautz, E.I.T. Project Engineer Infiltrator Systems, Inc. 4 Business Park Road Old Saybrook, CT 06475

RE: Approval for the use of EZ flow drainfield products in Low Pressure Pipe systems in Delaware.

Dear Ms. Kautz.

The Division of Water Resources has received and reviewed your request to approve the use of Infiltrator System's EZ flow drainfield system as an alternative to gravel in Low Pressure Pipe (LPP) systems in Delaware. We are pleased to inform you that we are able to <u>approve</u> the products use referenced above, under the following conditions:

1) Capping fill LPP systems using EZ flow would require a minimum depth to limiting zone of 30" and a maximum depth to limiting zone of 38". The system would be capped with 9" of soil either above original grade or combined above and below grade depending on the trench depth.

Full Depth LPP's using EZ flow would have a minimum depth to limiting zone of 39" or greater utilizing 9" of cover.

(It should be noted that these numbers are 3"greater or deeper than those of stone trenches which is in direct proportion to the 3" difference between the typical stone trench and the EZ flow diameter)

2) Earthen dams will still be required. They are to be located where sections of EZ flow are joined together. This will cause their spacing to be in multiples of the 5' and 10' lengths of EZ flow that are available. They are to be constructed in the same manner as those in stone trenches unless Infiltrator Systems, Inc. or the licensed Class C design engineer present a viable alternative construction method within a permit application.

Additionally, as this approval letter will no doubt be forwarded to Class C Engineers to inform them of EZ flow's new approval, the design specifications provided in the product approval request should be readily available from Infiltrator Systems for their use.

If you have any other questions please feel free to contact me at 856-4561.

Sincerely,

James Cassidy

Program Manager I

Ground Water Discharges Section

Cc: file



GEOSYNTHETIC AGGREGATE TECHNOLOGY



EZflow by Infiltrator is an environmentally friendly replacement to traditional stone and pipe drainfields using an engineered geosynthetic aggregate modular design. The EZflow system is designed to improve infiltration performance by eliminating the fines associated with crushed stone, and reducing compaction and embedment associated with stone. Preassembled units include a 3" or 4" perforated pipe surrounded by aggregate and held in place with a durable high-strength netting. This product comes in easy-to-contour 5' and 10' lengths and in diameters of 7, 8, 9, 10, 12, 13, or 14 inches. Diameters of 18 inches available in select markets.

Lightweight expanded polystyrene

construction offers structural integrity and resists compaction. Engineered flow-channels increase void spacecreating improved water flow and greater storage.



Compared with stone and pipe, benefits include:

- · Always clean and free of fines
- Bundles are quick to install, saving costs on heavy machinery and labor
- Modular construction allows configurations to match trench dimensions for most system shapes and sizes
- Engineered for optimal storage and absorption efficiencies
- Ability to contour along sloped sites and around trees or landscaping
- Lightweight system is perfect for repairs and tight job sites
- Easily hand-carried into position reducing time and labor
- 5' or 10' lengths with simple snap, internal couplers
- · Easier cleanup at the job site with the elimination of stone
- Manufactured from recycled materials rather than a mined natural resource
- A wide variety of diameters and configurations to meet any installation professional's needs
- Approved in many jurisdictions with an increased efficiency rating, reducing drainfield size
- Backed by the leader in the onsite wastewater industry

Bundle System Configurations: Available in 7", 8", 9", 10", 12", 13" and 14" diameter bundles.



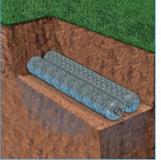
Single Bundle

0701P-GEO 1201P-GEO 0801P-GEO 1401P-GEO 1201P-GEO 1801P-GEO 1001P-GEO



Triangular Bundle

1003T-GEO 1303T-GEO 1203T-GEO 1403T-GEO





Horizontal Bundles

0705H-GEO 1303H-GEO 0904H-GEO 1202H-GEO 1002H-GEO 1203H-GEO





Vertical Bundles

1002V-GEO 1006V-GEO 1003V-GEO 1202V-GEO 1004V-GEO

1203V-GEO 1206V-GEO 1204V-GEO 1402V-GEO



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Notes:

- 1. Other systems include 10" and 12" bed systems. Bed size will dictate the number of bundles.
- 2. System dimensions are dependent upon bundle diameter and configuration.
- 3. LLP is for "Low Pressure Pipe" in which a pressurized distribution pipe is field installed within the corrugated pipe.
- 4. Internal pipe and couplings meet the requirements of ASTM F405.
- 5. Bundles are also available without geotextile between the netting and synthetic aggregrate.

INFILTRATOR WATER TECHNOLOGIES STANDARD LIMITED WARRANTY

(a) The structural integrity of each EZflow by Infiltrator expanded polystyrene drainfield system and other accessories manufactured by EZflow by Infiltrator ("Units"), when installed and operated in a leachfield of an onsite septic system in accordance with Infiltrator's instructions, is warranted to the original purchaser ("Holder") against defective materials and workmanship for one year from the date that the septic permit is issued for the septic system containing the Units; provided, however, that if a septic permit is not required by applicable law, the warranty period will begin upon the date that installation of the septic system commences. To exercise its warranty rights, Holder must notify Infiltrator in writing at its Corporate Headquarters in Old Saybrook, Connecticut within fifteen (15) days of the alleged defect. Infiltrator will supply replacement Units for Units determined by EZflow by Infiltrator to be covered by this Limited Warranty. EZflow by Infiltrator's liability specifically excludes the cost of removal and/or installation of the Units.

(b)THE LIMITED WARRANTY AND REMEDIES IN SUBPARAGRAPH (a) ARE EXCLUSIVE. THERE ARE NO OTHER WARRANTIES WITH RESPECT TO THE UNITS. INCLUDING NO IMPLIED WARRANTIES OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR

(c) This Limited Warranty shall be void if any part of the EZflow system is manufactured by anyone other than EZflow by Infiltrator. The Limited Warranty does not extend to incidental, consequential, special or indirect damages. Infiltrator shall not be liable for penalties or liquidated damages, including loss of production and profits, labor and materials, overhead costs, or other losses or expenses incurred by the Holder or any third party. Specifically excluded from Limited Warranty coverage are damage to the Units due to ordinary wear and tear, alteration, accident, misuse, abuse or neglect of the Units; the Units being subjected to vehicle traffic or other conditions which are not permitted by the installation instructions; failure to maintain the minimum ground covers set forth in the installation instructions; the placement of improper materials into the system containing the Units; failure of the Units or the septic system due to improper siting or improper sizing, excessive water usage, improper grease disposal, or improper operation; or any other event not caused by Infiltrator. This Limited Warranty shall be void if the Holder fails to comply with all of the terms set forth in this Limited Warranty. Further, in no event shall Infiltrator be responsible for any loss or damage to the Holder, the Units, or any third party resulting from installation or shipment, or from any product liability claims of Holder or any third party. For this Limited Warranty to apply, the Units must be installed in accordance with all site conditions required by state and local codes; all other applicable laws; and Infiltrator's installation instructions.

(d) No representative of Infiltrator has the authority to change or extend this Limited Warranty. No warranty applies to any party other than the original Holder.

The above represents the Standard Limited Warranty offered by Infiltrator. A limited number of states and counties have different warranty requirements. Any purchaser of Units should contact Infiltrator's Corporate Headquarters in Old Saybrook, Connecticut, prior to such purchase, to obtain a copy of the applicable warranty, and should carefully read that warranty prior to the purchase of Units.

U.S. Patents: 8322948; 8337119; 8297880; 7914230; 7008138. Other patents pending. Infiltrator, Quick4 and EZflow are registered trademarks of Infiltrator Water Technologies. Infiltrator Water Technologies is a wholly-owned subsidiary of, Advanced Drainage Systems, Inc. (ADS).