

Evan Bayh, Governor

John C. Bailey, M.D., State Health Commissioner

Indiana State Department of Health
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Indianapolis, IN 46204
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Indiana State Department of Health

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DATE: December 4, 1996

TO: Local Health Departments

FROM: Alan M. Dunn, Supervisor *AMO*
Residential Sewage Disposal
Sanitary Engineering
AC (317) 233-7177

SUBJECT: Residential On-Site Sewage Disposal
Use of Infiltrator System Technology

The Indiana State Department of Health (ISDH), and Infiltrator Systems, Inc., have come to an understanding concerning the use of Infiltrator's technology in Indiana. These systems are subsurface absorption systems using high density polyethylene chambers as an alternative to the use of gravel in the absorption field trenches. Part of that understanding is outlined in my memorandum of November 22, 1996, to all local health departments, about the use of chamber systems.

Concerning the use of the technology as proposed by Infiltrator Systems, Inc., ISDH will permit the installation of the standard "Sidewinder" and "Equalizer 36" per manufacturer's instructions with the following stipulations:

1. That ISDH be notified by a representative of Infiltrator Systems, Inc., the local health department, or the property owner, whenever application is made for the installation of a system. The ISDH will request local health departments inform the ISDH when application is made. The ISDH will notify Infiltrator Systems, Inc., if there are counties in which the local health department will not notify the ISDH when application is made.
2. That a five year guarantee against failure, as defined by ISDH Rule 410 IAC 6-8.1-8 be provided by Infiltrator Systems, Inc., for each system, assuming installation in accordance with the applicable provisions of Indiana Code and manufacturer's instructions.

"...helping Hoosiers attain the highest level of health possible."

3. That system size will be in accordance with manufacturer's instructions. Current manufacturer's instructions are set out in the attached September 5, 1996, letter from Stephen P. Dix, P.E., Technical Director, Infiltrator Systems, Inc.
4. That original installations include a set aside area of sufficient size to allow for installation of a system as currently described in Rule 410 IAC 6-8.1.
5. That a water meter or flow measuring device be installed on at least one installation in ten, to monitor hydraulic loading of the system. The connection of the residence or facility to a public water supply that provides monthly water usage records will meet this requirement. Each of these systems must also be provided with monitoring wells or access ports in each trench so that system performance may be monitored. It is understood that ISDH will waive this requirement once ISDH determines that sufficient systems have been installed to provide information about system performance in various soils.
6. That local health departments agree to notify ISDH of any alteration or repair of any downsized Infiltrator system. [Pursuant to ISDH Rule 410 IAC 6-8.1-33(a), a permit must be obtained from the local health department prior to any alteration or repair of the system.]

The easiest method of determining the size of the absorption field under the provisions of this memorandum is as follows:

1. Determine the absorption area (in square feet) for the appropriate subsurface system from ISDH Rule 410 IAC 6-8.1-52(a), 53(a), 54(a), or 55(a), whichever section is applicable.
2. Divide the total absorption area by three to determine the total number of lineal feet required for a three foot wide gravel filled trench system.
3. For the Equilizer 36, there is a one to one ratio (the number of lineal feet of Equilizer 36 required is the same as the number of lineal feet of a three foot wide gravel filled trench system).
4. For the Standard Sidewinder, divide the total square feet required for the system by 5 to determine the number of lineal feet required; or, multiply the number of lineal feet required for a three foot wide gravel filled trench system by 0.6 to determine the total lineal feet of Standard Sidewinder that would be required.

These systems must meet all other applicable provisions of Indiana Code. They may not be used on sites where subsurface trench systems would be prohibited due to insufficient area, excessive slope, inappropriate landscape position, excessive permeability, insufficient depth to bedrock or other limiting layer, or a shallow seasonal high water table which cannot be lowered (See ISDH Rule 410 IAC 6-8.1-49).

The use of these systems shall meet all other applicable Indiana State Department of Health rules as well as all other standards set by local ordinance. The acceptance of this type of system by the Indiana State Department of Health does not relieve the builder, home owner, or system installer of the responsibility for compliance with state rule and local ordinances.

Please note that a part of this understanding is that ISDH be notified whenever an application is made for the installation of a system. We have agreed that we would request that the local health departments provide that notification. **If you are unwilling to provide that notification, please let me know, in writing, so that I may so advise Infiltrator, Inc.** After notification of ISDH upon the receipt of an application, and upon verification that the system will comply with applicable standards outlined in Rule 410 IAC 6-8.1 and this memorandum, the system may be approved by the local health department without individual review by ISDH.

If you have any questions, please contact this office.

Attachment

cc: Environmental Health staff
Plan Review staff
Residential Sewage Disposal staff



Leading the way in septic and stormwater chamber systems

September 5, 1996

Howard Cundiff
Indiana State Board of Health
1330 West Michigan Street
PO Box 1964
Indianapolis, IN 46206-1964

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INDIANA STATE DEPARTMENT OF HEALTH
BUREAU OF CONSUMER SERVICES

Dear Mr. Cundiff:

Roy Moore asked me to provide you with additional information on how to size the Equalizer™ 36 chamber and the standard SideWinder™ chamber. The Equalizer™ 36 is sized as a substitute media for your conventional 36 inch trench. The linear footage of the three foot trench for this product is the same as for your 36 inch wide trench. For example, if you have a three bedroom house in a silty clay soil that requires 500 square feet per bedroom, 1,500 square feet of bottom absorption area system would be installed. For a conventional 36 inch trench, 500 feet of a three foot wide gravel trench would be installed. For the Equalizer™ 36 chamber, 500 feet or 60 chambers would be required in a two foot wide trench. The Equalizer™ 36 is therefore rated at 3 square feet per foot or 25 square feet per unit. This is applicable for all soil classifications currently allowed for gravel systems.

The Standard SideWinder™ chamber is another option and is sized based on an equivalent area of 31.25 square feet per unit or 5 square feet per foot. Sizing this product to the above example, we would divide 5 square feet per foot into 1500 square feet and derive a requirement of 300 lineal feet of this product in a three foot wide trench. This sizing applies to all soil classifications currently allowed for gravel systems.

In cases where a fraction of a whole chamber is needed, such as 38.4 SideWinder chambers for a four bedroom home in a loam soil, a minimum of 39 SideWinder chambers would be required.

Very truly yours,

Stephen P. Dix, P.E.
Technical Director

SPD:mn