

Well and Onsite Wastewater Facts

WASTEWATER TECHNOLOGY

FSN -10

Loudoun County Health Department

July 2016

Component Type: Dispersal

Function: A Low Pressure Distribution Dispersal System distributes water to the trenches under pressure so that the same amount is distributed all over the trenches

Manufacturers: These systems are not manufactured units.

First approved in Virginia: 1982

Number installed in Loudoun County: 359

Allowance to reduce dispersal field footprint: yes

Description of Use

The difference between either a conventional system or a conventional pump system and the Low Pressure Distribution System is the way that the wastewater is distributed in the trenches. The construction is similar to conventional trenches except that it is an engineered design consisting of a pump tank and pump connected to manifold/valving and a small diameter pipe in the trenches with small (approximately 1/4 in.) holes, spaced evenly so that the pressure is equalized across the distribution system. The system distributes the wastewater equally in all parts of the trenches so that treatment in the trenches is uniform across the drainfield. Conventional and conventional pump rely on gravity to bring the wastewater to the end of the trenches. Therefore, with conventional systems the beginning of the trenches always get more wastewater.

Recommended Maintenance Required

With septic wastewater going through the small diameter lines, over time sludge will build up and clog both the holes and the line itself if it is not cleaned periodically. Also before the hole or line clog completely, the difference in the opening or diameter of the pipe will cause differences in the pressure changing the distribution of the wastewater. The recommended maintenance consists of checking the pump and dosing; cleaning the line with pressure, suction and/or brush run through each line; and check the equalization of pressure in the lines (typically done with a clear riser attached to the end of each line) and making necessary adjustments.

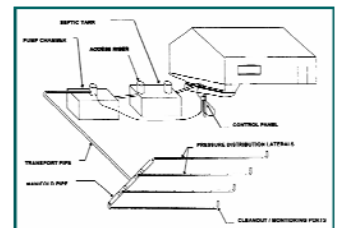
Low Pressure Distribution



Example but above ground so it can be seen



Example showing equal distribution.



System Sketch