

Well and Onsite Wastewater Facts

WASTEWATER TECHNOLOGY

FSN - 11

Loudoun County Health Department

July 2016

Component Type: Dispersal

Function: Drip distribution system is designed to distribute wastewater evenly across an absorption area. It provides greater flexibility in installation.

Manufacturers:

Netifin (pressure compensating emitter) & Perc-Rite system --
American Manufacturing Co. Inc.
Culpeper, VA

Geoflo (turbulent flow emitter) –
GEOFLO Inc.
Corte Madera, CA

First approved in Virginia: 1995

Number installed in Loudoun County: 236

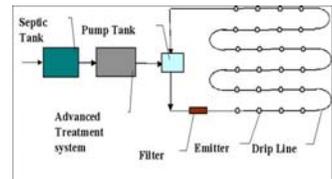
Description of Use

Drip line can be installed directly into the soil without digging trenches except for the manifolds and end loops. It can be installed around trees and at shallow depths (high water table or shallow rock). Drip line is ½ inch flexible pipe with emitters every 1' to 2' apart. The technology concept is to place a small precise amount of wastewater into the soil at each emitter (typically a 2' X 2' grid) allowing the most efficient distribution of the wastewater. These systems require an engineered design. Due to differences in the tubing, the design is specific to the tubing used. Because of their efficiency, they can be used in poor soils where conventional dispersal systems cannot be used. Drip systems typically include a hydraulic unit, supply manifold, air release valves, spin filters, pump tank, and zone valves. Often these components are controlled by some form of an electronic system. Some electronic systems allow an operator to see levels in tanks, flows, and other information used for operation at a remote location.

Recommended Maintenance Required

Recommended operation, monitoring and maintenance of these systems varies from monthly to annually, depending upon their complexity, the system providing the pretreatment, telemetry, and size. Things to check are, pump calibration, switches, timers, zone rotation, ponding, spin filter, tank levels, and flow.

Drip Distribution



System Sketch



Drip field example above ground



Drip Line



Installed