STATES WITH GUIDANCE UNSPECIFIED OR LESS THAN 2 FT/SECOND

New Jersey Guidance Document

Manufacturer's recommendation

E. Drip Dispersal System Design
9. The system shall be capable of forward flushing each drip field or zone at a minimum fluid velocity as required by the dripperline manufacturer back to the head of the pre-treatment train or a settling tank to allow for primary settling prior to a dosing station. Field flushing velocity shall be designed at the distal end of each lateral connection. **Field flushing shall be accomplished automatically according to manufacturer's recommendations** to prevent damage to the drip tubing and maintain product warranty.

Indiana Standards for Subsurface Drip Soil Absorption Field Technology

These standards apply to subsurface drip soil absorption field (SAF) technology manufactured by Geoflow, Inc. and Netafim USA

II. General requirements:
A. Subsurface drip systems must perform according to the dripline manufacturer's requirements.
B. Subsurface drip systems must be designed and installed according to the dripline manufacturer's design and installation manual, in a manner that complies with these standards, and applicable sections of *410 IAC 6-8.1, Residential Sewage Disposal Systems, 410 IAC 6-10, Commercial Onsite Wastewater Disposal,* and *Bulletin S.E. 13, Onsite Water Supply and Wastewater Disposal for Public and Commercial Establishments,* except as approved by the department.

6. The system hydraulics for dosing and flushing the driplines must:
a. Perform within the design parameters of the manufacturer as calculated using the manufacturer's design spreadsheet; and
b. Have a velocity of effluent at the end of the dripline laterals during flushing of 1 foot per second or greater, or the manufacturer's recommended velocity, whichever is greater.

Texas

No velocity specified

(C) System flushing. Systems must be equipped to flush the contents of the lines back to the pretreatment unit when intermittent flushing is used. If continuous flushing is used during the pumping cycle, the contents of the lines must be returned to the pump tank.

Illinois

Manufacturer's recommendation

Flush Valves. At a minimum, manual flush valves shall be provided on the filter and subsurface drip distribution system, to allow for periodic flushing of both the subsurface drip distribution system and the filter. When manual flush valves are provided, an annual maintenance contract shall be in force with a subsurface drip irrigation system service provider to provide maintenance. Maintenance shall include at least two inspection/service calls, at least one every 6 months, which includes inspection, adjustment, replacement, cleaning, flushing and servicing of the mechanical and the applicable component parts to ensure proper function and compliance with the Code and these Guidelines. The initial maintenance contract shall also provide for a similar inspection 30 days after the system is placed into service. The maintenance contract shall not be required if an automatic flushing system is installed on the subsurface drip irrigation system, however, it is strongly recommended to assure proper functioning of the system. The subsurface drip irrigation system manufacturer shall provide the specifications for the flush valves that are acceptable to use with their subsurface drip irrigation system. The manufacturer shall also provide specifications on the number of flush valves to be used and their location with specifications about how this is to be determined and the backwash velocity required to clean the subsurface drip tubing and piping. A chemical injection port shall be installed to facilitate cleaning and flushing the subsurface drip distribution system. Backwash water shall be directed into the building sewer at the inlet end of the pretreatment system. The designer of the subsurface drip irrigation system shall assure that the flush valves used are in compliance with this specification and properly located.

California Draft AB885

No velocity specified

(3) all systems shall be maintained to reduce emitter biological growth plugging and root intrusion.

Massachusetts

No velocity specified

v. Wastewater Classic or Wasteflow PC drip tubing lines spaced 24 inches apart with drip tubing emitters spaced 24 inches on center. When smaller spacing is used the dispersal field shall still be sized based on the minimum 24-inch spacing. When tubing line spacing is greater than 24 inches by 24 inches, the size of the dispersal field shall be increased so that the number of emitters is equal to the number that would have been installed in the standard 24 inch by 24-inch scenario. Drip tubing lines installed as level as possible on contour and at least 6 inches below finished grade. More than the minimum length of tubing may be utilized within a properly sized SAS. The drip dispersal tubing shall be automatically forward flushed after a pre-programmed number of dosing cycles as determined by the Company. All drip line flush water shall be conveyed back to a settling tank or to a septic tank.

Florida

Manufacturer's design manuals

12. All drip emitter systems shall be designed as continuous loop circuits with no dead-end emitter lines. All systems need to incorporate a mechanism for backwashing or flushing.

25. Manufacturer's of drip effluent disposal system components shall provide design and installation manuals for engineering and construction guidance. Design manuals shall include tables that detail flow rates vs. pressure and pressure loss per length(s) of distribution pipe.

Washington State

No velocity specified

Small diameter dripline and emitters are vulnerable to plugging from a buildup of bacterial slime and/or scale.	Periodic line flushing is required for all drip systems. Geoflow dripline interior wall is coated with a bactericide. Netafim implants a bactericide into emitters. Mild chlorine or acid solutions can be injected if needed (a chemical injector port is required on all systems). Chemical solutions used to scour dripline must be returned to the primary treatment tank.

3.9. Flushing

3.9.1 All SDS must include means to backwash filters and flush dripline/manifolds

3.9.2 Both supply and return manifolds are required on all systems.

Arkansas

No velocity specified

Flush the field lines to remove any materials collected in the lines and/or emitters.

Ohio – Draft

Specifies frequency not velocity

(9) The drip tubing shall be maintained through an automated scouring flush at a frequency adequate to prevent coating of the drip tubing and clogging of emitters. The frequency shall be specified in the design plan and shall not be less than twice a month per zone under normal operating conditions and shall be adjustable for actual operating conditions. Drip tubing flushes and filters flushes used to reduce solids going to emitters shall be returned to the influent end of the pretreatment component or septic tank. In the case where flush volumes may disrupt the process of a pretreatment component, added pretreatment component capacity shall be required.
