

15A NCAC 18E .1205 ADVANCED PRETREATMENT SAND LINED TRENCH SYSTEMS

- (a) Sand lined trench systems with a DDF less than or equal to 1,500 gpd receiving TS-I or TS-II effluent shall meet the requirements of this Rule.
- (b) The site meets the criteria in Rule .0906(c) of this Subchapter and the receiving permeable horizon may be deeper than 60 inches below the natural grade.
- (c) If a groundwater lowering system is used to comply with the vertical separation to a SWC, the following conditions shall apply:
 - (1) the site shall comply with the requirements of Rule .0906(d) of this Subchapter; and
 - (2) the vertical separation requirement to a SWC shall be reduced to nine inches with pressure dosed gravity distribution or six inches with pressure dispersal.
- (d) Table XXXI shall be used to determine the LTAR for a sand-lined trench system and shall be based on the most limiting, naturally occurring soils overlying the permeable receiving layer. An equivalent trench width of three feet shall be used to determine trench length in accordance with Rule .0901(d) of this Subchapter. The LTAR shall be one of the following:
 - (1) the rate set forth in Table XXXI; or
 - (2) 20 percent of the in-situ Ksat of the receiving permeable horizon, whichever is less.

TABLE XXXI. LTAR for advanced pretreatment sand lined systems based on texture of the most hydraulically limiting overlying soil horizon

Soil Group	Texture of Most Hydraulically Limiting Overlying Soil Horizon	LTAR in gpd/ft²*
I	Sand	0.9 – 1.4
II	Coarse Loams	0.7 – 1.0
III	Fine Loams	0.4 – 0.8
IV	Clays	0.2 – 0.4

*There shall be no reduction in trench length compared to a conventional gravel trench when Accepted or Innovative gravelless trench product is used.

- (e) A Special Site Evaluation in accordance with Rule .0510 of this Subchapter shall be required for the following conditions to field verify the LTAR:
 - (1) when the texture of the receiving permeable horizon is sandy loam or loam, and the system DDF is greater than 600 gpd; or
 - (2) when the texture of the receiving permeable horizon is silt loam.
- (f) Setbacks in accordance with Table XXVIII of Rule .1202(d) of this Section shall be applied to sand lined trench systems.
- (g) Sand lined trench system installation shall be in accordance with Rule .0906(h) of this Subchapter.

History Note: Authority G.S. 130A-334; 130A-335; 130A-342; 130A-343; Eff. January 1, 2024.