## 15A NCAC 02T .0605 DESIGN CRITERIA

- (a) The requirements in this Rule shall apply to new and expanding facilities.
- (b) Minimum degree of treatment for new and expanding systems shall meet a monthly average of each of the following:
  - (1) five-day biochemical oxygen demand  $(BOD_5) \le 30 \text{ mg/L}$ ;
  - (2) total suspended solids (TSS)  $\leq$  30 mg/L;
  - (3) ammonia  $(NH_3-N) \le 15 \text{ mg/L}$ ; and
  - (4) fecal coliforms  $\leq 200$  colonies/100 mL.
- (c) Waste, including treated waste, shall not be placed directly into, or in contact with, GA classified groundwater unless such placement will not result in a contravention of GA groundwater standards, as demonstrated by predictive calculations or modeling.
- (d) Excavation into bedrock shall be lined with a 10 millimeter synthetic liner.
- (e) Earthen treatment and storage facilities shall be prohibited.
- (f) By-pass and overflow lines shall be prohibited.
- (g) A water-tight seal on all treatment and storage units or two feet of protection from the 100-year flood elevation shall be provided.
- (h) Preparation of an operational management plan and, if appropriate, a crop management plan shall be provided.
- (i) Fencing shall be provided to prevent access to the irrigation site and treatment units shall be lockable.
- (j) Irrigation system design shall not exceed the recommended precipitation rates in the soils report prepared pursuant to Rule .0604 of this Section.
- (k) Septic tanks shall adhere to 15A NCAC 18A .1900.
- (1) Tablet chlorination or ultraviolet disinfection shall be provided.
- (m) Five days of storage based on average daily flow between the pump off float and inlet invert pipe shall be provided.
- (n) Pump and dosing tanks shall have audible and visual alarms external to any structure.
- (o) A rain or moisture sensor shall be provided to prevent irrigation during precipitation events or wet conditions that would cause runoff.
- (p) 18 inches of vertical separation between the apparent seasonal high water table and the ground surface shall be provided.
- (q) One foot of vertical separation between any perched seasonal high water table and the ground surface shall be provided.
- (r) Loading rates shall not exceed 50 inches per year.

History Note: Authority G.S. 143-215.1; 143-215.3(a);

Eff. September 1, 2006;

Readopted Eff. September 1, 2018.