

15A NCAC 2H .1059 MDC FOR LEVEL SPREADER-FILTER STRIPS

The purpose of this Rule is to set forth the design requirements for level spreader-filter strips that are constructed to meet the requirements of this Section.

- (1) **LEVEL SPREADER LENGTH.** The level spreader shall be a minimum of 10 feet in length per one cubic foot per second of stormwater flow that is directed to it.
- (2) **REQUIRED STORM INTENSITY AND BYPASS.** The required storm intensity and bypass system shall be based on the source of the stormwater:
 - (a) a level spreader that receives flow directly from the drainage area shall be sized based on the flow rate during the 0.75 inch per hour storm, with a flow bypass system for larger storm events; or
 - (b) a level spreader that receives flow from an SCM shall be sized based on the draw down rate of the design volume, with a flow bypass for larger storm events.
- (3) **EXCEPTION FROM FLOW BYPASS REQUIREMENT.** A flow bypass system shall not be needed if the level spreader is sized to handle the flow during 10-year storm event.
- (4) **BLIND SWALE.** Upslope of the level spreader, there shall be a blind swale or other method of ponding water. The blind swale shall be designed to provide for uniform overtopping of the level spreader.
- (5) **LEVEL SPREADER SPECIFICATIONS.** The lip of the level spreader shall be at a uniform elevation with a construction tolerance of plus or minus 0.25 inch at any point along its length. The level spreader shall be constructed of concrete or other stable material.
- (6) **LEVEL SPREADER SHAPE.** The level spreader shall be straight or convex in plan view.
- (7) **TRANSITION ZONE.** Downslope of the level spreader, there shall be a one to three inch drop followed by a transition zone that shall be protected from erosion by aggregate or high performance turf reinforcement matting. The transition zone shall be a minimum of 12 inches wide.
- (8) **MINIMUM WIDTH OF THE FILTER STRIP.** The minimum width of the filter strip shall be 30 feet, measured perpendicular to the level spreader lip.
- (9) **NO DRAWS OR CHANNELS IN THE FILTER STRIP.** The filter strip shall not contain draws or channels.
- (10) **FILTER STRIP SPECIFICATIONS.** The following specifications shall apply to the filter strip:
 - (a) filter strips shall be graded with a uniform transverse slope of eight percent or less;
 - (b) the pH, compaction, and other attributes of the first 12 inches of the soil shall be adjusted if necessary to promote plant establishment and growth;
 - (c) the filter strip and side slopes shall be planted with non-clumping, deep-rooted grass sod; and
 - (d) soils shall be stabilized with temporary means such as straw or matting until the permanent vegetative cover has taken root or the runoff shall be directed elsewhere until vegetation has established.

History Note: Authority G.S. 143-214.7B; 143-215.1; 143-215.3(a);
Eff. January 1, 2017.