May 24, 2022

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To: Mrs. Ariel Wessel-Fuss Ariel.Wessel-Fuss@tn.gov

Re: General NPDES Permit for discharges from Small Municipal Separate Storm Sewer Systems Permit Number TNS100000

Following are my comments on TDEC's Draft General NPDES Permit for Discharges from Small Municipal Separate Storm Sewer Systems (sMS4s). Thank you for this opportunity to comment, and I am very sorry that I mis-noted the deadline as May 24th so my comments are one day late. I am sending anyway and understand that they will not be part of the public record, but I hope they can be useful in some way.

1.3.3.2, also on 4.2.3 d (p. 24) - I suggest more guidance to the permittee is needed in determining whether any of these otherwise excluded-from-prohibition non-stormwater discharges are in fact causing a problem in the permittee's stormwater/receiving streams? For example, what kind of evidence or or data are needed? Is the permittee expected to go through such an evaluation for each discharge category, or is absence of any data to the contrary considered proof that a discharge category is not causing a problem? Should the NOI include some statements by the permittee about this documentation?

Similar comment on the following page, second row of table.

4.2.5.2c (p. 33 ) - need further definition of uncontaminated roof runoff - does this mean from green roofs , for example? Otherwise roof runoff is certainly NOT uncontaminated. For example see this article from the journal Chemosphere , 2003. <a href="https://www.sciencedirect.com/science/article/abs/pii/S0045653503004545?via%3Dihub">https://www.sciencedirect.com/science/article/abs/pii/S0045653503004545?via%3Dihub</a>. (I can send the PDF if that would be helpful). Therefore I suggest deleting such an exclusion, or making it clear that it refers only to green roofs or other very specific roof types.

I am concerned that there is no mention of, or control measures required for, one of stormwater's most significant negative impacts on stream quality in urbanizing areas - the increase in peak flow rates of storms of a given

recurrence interval, and therefore concomitant increase in frequency of erosive peak flow rates which in turn causes increased scouring and erosion/siltation of urban stream banks/beds and degraded habitat. Increased frequency of erosive peak flows is caused by increased runoff from impervious areas after development. The SCMs described in this permit are intended to control mass of pollutants leaving developed sites (so mass is no higher than predevelopment) and this will protect rivers some distance downstream from urban areas. In order to protect streams in or directly downstream of developed areas from erosion, siltation, and habitat degradation due to higher storm peaks, however, SCMs must also be designed to maintain post development peak runoff rates to pre development rates. Absent a specific requirement for such design criteria, I suggest that the permit language should acknowledge this protection shortfall and encourage the permittee (through incentives such as mentioned in 4.2.5.2 f, on p. 35) to adopt SCMs designed to maintain post development to pre development peak runoff rates.

Thank you again for the opportunity to voice my concerns.

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