

From: [Ariel Wessel-Fuss](#)
To: [Liz Campbell](#)
Subject: FW: [EXTERNAL] Comments on TNS000000 permitting
Date: Monday, May 9, 2022 7:55:37 AM
Attachments: [PG40DA.pdf](#)

From: Anthony Wheeler 1831 Lewis Mine Rd. Signal Mountain, TN 37377 423-580-3433
<awhee17625@aol.com>

Sent: Saturday, May 7, 2022 7:31 AM

To: Ariel Wessel-Fuss <Ariel.Wessel-Fuss@tn.gov>

Cc: dawsonwheeler00@gmail.com; dfisher@hbagc.net; dreuter@chattanooga.gov;
krennich@chattanooga.gov; leslie@agcetn.org; slrmurdock@yahoo.com; chuckpreutt@gmail.com;
chipbaker58@gmail.com; smbanbury@gmail.com; whmoll@aol.com; bpaddock@twlakes.net;
pedh2o@gmail.com; rep.patsy.hazlewood@capitol.tn.gov; catherinelcolby@gmail.com;
dianeryder@epbfi.com; lcollins105@comcast.net; leeharper@comcast.net;
marybeth@mywaterways.org; alturadrive@yahoo.com; mprescott@waldentn.gov; lee.davis@davis-
hoss.com; ahc2111@gmail.com; eschmidtatty@live.com

Subject: [EXTERNAL] Comments on TNS000000 permitting

***** This is an EXTERNAL email. Please exercise caution. DO NOT open attachments or click links from unknown senders or unexpected email - STS-Security. *****

Dear Ariel,

There is great concern over the redefinition of stormwater as defined in the TNS00000 section 2.4.5.2 proposed permitting as describe by the attached comments by Paul Davis. The "quality" of the water is not what the stormwater control process is designed to regulate, but rather the quantity of runoff necessary to protect streams and communities from the damage due to erosion, siltation, natural drainage structures, and damage to infrastructure caused by ever increasing impermeable surfaces and rain fall. Water quality does not affect the quantity of runoff.

Home builders and contractors may benefit from this change, but communities and municipalities will pay the penalty for undersized stormwater management. Please remove this part of 2.4.5.2 in the interest of public safety and the environment.

Tony Wheeler
Environmental Representative
Mountain Planning Group
Walden's Ridge, Tennessee

4.2.5.2. **Permanent Stormwater Standards.**

- a. The permanent stormwater management program must require new development and redevelopment projects to be designed to reduce pollutants to the MEP, as set forth herein. Compliance with permanent stormwater standards for new development and redevelopment projects is determined by designing and installing SCMs as established by Tennessee Rule 0400-40-10-.04 and complying with other requirements of Tennessee Rule 0400-40-10-.04. For design purposes, total suspended solids (TSS) may be used as the indicator for the reduction of pollutants.
- b. SCMs must be designed to provide full treatment capacity within 72 hours following the end of the preceding rain event for the life of the new development or redevelopment project. The permittee shall identify a suite of SCMs to be used in various situations. Information relevant to identified SCMs should be made readily available. Application of innovative SCMs is encouraged. If the permittee decides to significantly limit the number of SCM options, it must be documented in the stormwater management program how the performance standards of Tennessee Rule 0400-40-10-.04 can be met with the limited set of control measures that are allowed.

Approx 3.5" middle TN

- c. The water quality treatment design storm is a 1-year, 24-hour storm event as defined by Precipitation-Frequency Atlas of the United States. Atlas 14. Volume 2. Version 3.0. U.S. Department of Commerce. National Oceanic and Atmospheric Administration (NOAA), National Weather Service, Hydrometeorological Design Studies Center, Silver Springs, Maryland or its digital product equivalent. The water quality treatment volume (WQTV) is a portion of the runoff generated from impervious surfaces at a new development or redevelopment project by the design storm, as set forth below. Uncontaminated roof runoff may be excluded from the WQTV. SCMs must be designed, at a minimum, to achieve an overall treatment efficiency of 80% TSS removal from the WQTV. The quantity of the WQTV depends on the type of treatment provided, as established in the following table:

From a Google search...
What is the difference between contaminated and polluted?
Contamination is simply the presence of a substance where it should not be or at concentrations above background. Pollution is contamination that results in or can result in adverse biological effects to resident communities.



The "uncontaminated roof" exclusion should not have been in the rule or this permit.

- In urban settings, no runoff from impervious surfaces, including roofs, is uncontaminated.
- The proposed exclusion would directly violate NPDES rules requiring control of post-construction discharges to the Maximum Extent Practicable. Several existing TN MS4s have for years required post-construction controls to be designed for all impervious drainage. Same for other state SMS4 general permits as well as states where EPA retains NPDES permit authority. Tennessee cannot now propose less control and claim to protect its waters to the Maximum Extent Practicable.
- As reported by the 2018 TNH2O project, "MS4 discharges are by far the leading pollution source in Tennessee that is subject to regulation." Reducing post-construction stormwater control measures would unjustifiably lower protection for urban communities and waters in our state.
- Webster definition of "uncontaminated" - "not soiled, stained or corrupted by contact with something else"

**COUNTY OF RUTHERFORD
OFFICE OF COUNTY ENGINEER**

**One Public Square South
Murfreesboro, TN 37130
PHONE: (615) 898-7732**

**Mike Hughes, P.E.
County Engineer**

**Shelia Huffmire, P.E.
Assistant County Engineer**

**Ben Friend, P.E.
Project Engineer**

**Jeff Jaco
Sr. Engineering Tech**

**Darrin Boman
Engineering Tech**

**Taylor Hill
Engineering Tech**

**John Cortez
Stormwater Inspector**

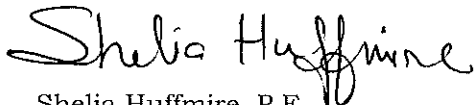
May 10, 2022

Tennessee Department of Environment and Conservation, Division of Water Resources
Attention: Ariel Wessel-Fuss
312 Rosa L. Parks Avenue, 11th Floor
Nashville, Tennessee 37243

Dear Ms. Wessel-Fuss,

This letter provides comments to the draft State of Tennessee NPDES small Municipal Separate Storm Sewer System (MS4) Permit (draft permit) published on March 22, 2022. These comments are submitted on behalf of the Rutherford County, TN.

Kind regards,



Shelia Huffmire, P.E.
Assistant County Engineer
Email: shuffmire@rutherfordcountyttn.gov

NPDES Draft Permit Comments – Rutherford County – Shelia Huffmire 5/10/2022

NPDES Draft Permit: – Public Meeting April 26, 2022, 5-6pm question and answer & 6-7 pm formal meeting

Written comments are extended until May 23rd.

Comments for Public Hearing:

1. Pg 12. Implementation Plan - Submit implementation plan for permanent stormwater management program 90 days from the Effective Date on the Notice of Coverage. Please make it line up with when our annual reports are due so that we can put them through the same process with our annual report for public meeting. – Recommendation is to say 90 days or when our annual report is due, whichever is later. General comment- the deadlines throughout this permit are very tight.
2. We would like to have an example of an implementation plan.
3. Why are there so many different timeframes and confusion throughout the permit. It would be much simpler if we had either 18 months or 24 months to get everything in place. One section we have 180 days for our SWMP, but what is the point if we haven't even finished our ordinances and subdivision regulations to support the permit language? Once again, the 18 and 24 month deadline is tight for accomplishing everything in a program.
4. Can TDEC put together a spreadsheet to help with the timeframe confusion?
5. Pg 13 - 4.1.2 Changes to regulatory mechanisms and implementation into the construction site runoff pollutant control program within 18 months of the reissuance of the construction general permit. Clearly identify or state which date is correct. It states 18 months on Pg 13 and 12 months on page 30 and clearly says that anything with legal authority can take up to 24 months. This is very confusing.
6. 4.2 Public Education is unattainable for most Phase II MS4s and the language is very confusing.
 - Parts: 4.2.1 Public Education and Outreach on Storm Water Impacts; 4.2.2 Public Involvement/Participation
Location: Pages 14 through 22, all sections of 4.2.1 and 4.2.2
Comment: What constitutes an "activity" and how are activities measured? For example, is having/using a social media account for stormwater education considered a single activity or can each post (or series of posts) on a different topic considered a single activity?
 - Part: 4.2.2 Public Involvement/Participation
Location: Pages 18 through 22

Comment: This entire section is confusing. The list of elements a through i. on page 18 does not seem to directly correspond to the management measures table on pages 19 and 20. Further these two permit elements do not seem to correspond well with the additional management measures tables on pages 21 and 22. Some requirements seem stated more than once, but in somewhat different ways making it difficult to clearly understand if these are separate requirements or the same. Suggest revising the control measure to the format used for the Public Education MCM, where the PIE plan provided the required activities, and the management measures tables outlined the activity minimums and reporting requirements.

- Part: 4.2.1.1 and 4.2.2.1 General Public

Location: Pages 14 through 22, 1st paragraph in both subparts

Comment: For both the public education and public involvement/participation control measures, the permit identifies the public as the target audience in subsections 4.2.1 and 4.2.2.1, and then further categorizes sub audiences under each subsection. It is unclear whether these sub-audiences are required targets or just suggested targets. Please clarify the required targets for both the public education and public involvement/participation activities. Suggested audiences should be moved to the rationale, so Division staff don't inadvertently include them as requirements during audits.

7. Pg 15 – 4.2.1.1 It would make more sense to combine Management Measures
c. Awareness on the proper storage, use, and disposal of pesticides, herbicides, and fertilizers and
d. Awareness on the proper storage, use, and disposal of oil and other automotive-related fluids into one measure.
8. Pg 15 – 4.2.1.1 It would make more sense for the chart on page 15 to say a., b., c. d. or e. instead of all must meet the 9X5=45 public outreach numbers. The MS4 can develop their PIE plan around these numbers and type of measures. It would make more sense for the MS4s to pick from the items available and create their PIE plan for the total number of activities to pick from all instead of multiplying each measure by the goal number.
9. 4.2.2 Public Involvement and Participation seems unattainable for most Phase II MS4s. The timeframe to implement this is too quick and not reasonable. This outline for education and outreach does not resemble what most MS4s are currently doing. I would hate to see the general education dissolve due to the new outline and requirements.
10. Pg 21 – 4.2.2.1 Based on the current measures and goals, the normal size MS4 would have to host 36 public participation events just in the general public section. To participate and host events with the public is usually on the weekends, this would mean 70% of weekends out of the year would have to be spent hosting a public participation event. This is not attainable.

11. Pg 21 – 4.2.2.1 It would make more sense for the chart on page 21 to say a., b., c., or d. instead of all must meet the 36 events. Then the MS4 can develop their PIE plan around these numbers and type of measures.
12. Page 29 - 4.2.4 g. Mechanisms or plans for public access to information on projects and receiving and considering comments from the public on those projects. – Define what is meant by project or construction project.
13. Page 38 - 4.2.5.6. Development Project Plan Review, Approval, and Enforcement
A verification process to document that SCMs have been installed per design specifications within 90 days of installation. Verification shall include submission of as-built plans to the permittee, permittee inspection, or inspection by a qualified design professional. The verification process shall include enforcement procedures to bring noncompliant projects into compliance, which shall be detailed in the enforcement response plan. – 90 days from installation does not seem like a rational number. I would have the permit read something like – each MS4 must have a process in place for their SCM verification process and completion of as-builts.
14. Page 42 - Establish a time frame for review of all plans and review 100% of all plans within that timeframe – I don't know why TDEC should make MS4s set a timeframe for plans review process for our communities. This is completely unnecessary and each MS4 should be able to decide how their process works. If a process is in place, then the MS4 is meeting the intent. Does the Federal Register state that this is a requirement?
Past small MS4 permits have already resulted in local government processes that eliminate (or severely limit) the commencement of land disturbance activities without an approved plan for construction site stormwater runoff control. This control is clear, effective, and implementable. Thus, it is difficult to understand the Division's desire in this permit to require specification, or even address the topic, of a timeframe for construction site plan reviews in this draft permit. Forcing permittees to specify plan review timeframes solely for purposes of permit compliance is unnecessary for water quality protection and an overstepping of the Division into individual local government land development processes to the benefit primarily of land developers. Plan review timeframes can vary widely, depending on a local government's land development process, the role(s) of other departments involved (e.g., planning, codes enforcement, etc.), matters unrelated to permit compliance, legal issues surrounding a specific land development, the completeness and quality of the submitted plan, and other factors. Additionally, It can also unnecessarily complicate local government land development processes, potentially resulting in activity ineffectiveness.

General Comments:

- The draft permit seems to apply a “one size fits all” approach in that it prescribes BMPs, measurable goals, and reporting deliverables. This is a significant divergence from past permits, which allowed permittees to craft their SWMP around their local stream impairments, citizen

complaints, water quality priorities, and water quality goals. This approach does not recognize that inherent differences exist among local governments and their individual capabilities to determine and ensure which BMPs are effective. **The Division should refrain from prescribing BMP descriptions and the types, number, and measurable goals for MCMs and instead focus on compliance minimums.**

- The draft permit includes a considerable increase in the level and specificity of required documentation and reporting. Numerous procedures, processes, and plans are identified, as well as an annual solicitor's certification, SWMP Evaluation Report, and the annual reporting deliverables identified in management measure tables. Some of these items seem unnecessary or redundant (detailed comments will follow). This increase in the level and specificity of required documentation and reporting will require substantially more permittee resources to implement and maintain at a time when permittees are resource-stressed already. The changes will force permittees to focus on getting paperwork done and keeping it updated each year rather than meaningful permit compliance and water quality protection. The Division should re-examine the level and specificity of required documentation and reporting in the draft permit and seek ways to reduce the administrative burden on permittees. For most of the new sub-plans, reports, procedures, and annual reporting requirements in the draft permit, a deadline for implementation is not provided. Does this mean permittees are required to step-up administratively immediately when the permit becomes effective? Given the substantial increase in documentation required by this permit and the potential need to secure additional staff or outside resources to prepare these items, permittees will need significant additional time to budget, plan, and prepare the new plans, reports, and procedures. This is especially true for the upgrade in compliance tracking required in the annual report. This change alone will require permittees to revisit current methods of compliance tracking, determine the changes needed to meet the new permit, coordinate with the departments affected, and allocate funding/resources required to upgrade. As well, the new permit could become effective near the beginning of a municipal fiscal year (July 2022) for many permittees. For these permittees, their FY22-23 budgets do not include funding to deal with such a substantial increase in the permit's administrative needs. As a result, at least three years from the effective date of the permit may be needed for permittees to budget, plan, and then implement the necessary changes.
- Part 5 of the Rationale is clear that acronym "SWMP" now means Stormwater Management Program in this permit. However, there are numerous statements pertaining to documentation in the SWMP or in the program that imply there are additional written elements required by the Division beyond the NOI and annual reports previously required. It is not always clear when something is required as a written element, and when it is not. The explanation of a SWMP in the rationale (i.e., the 3-ring binder sitting on a file cabinet) does not clarify the Division's expectations. Examples of confusing statements relevant to the SWMP are provided below.

3.1 Discharges to Waterbodies with Unavailable Parameters, 1st sentence, specifically the phrase and bolded words “the permittee **must document in its SWMP how** the BMPs will address the discharge of these pollutants”. While the remainder of the paragraph goes on to state that compliance with the requirement is demonstrated through monitoring, it is unclear how monitoring once every permit period demonstrates **how** BMPs address pollutants. Are monitoring results alone sufficient or must permittees extrapolate conclusions from monitoring results as they relate to BMP effectiveness? It is suggested the permit clearly identify how the permittees must “document in their SWMP **how**” or that the sentence be revised to something like “the permittee’s SWMP must address the discharge of these pollutants”.

4.1 Requirements, 1st paragraph, 3rd sentence “The elements of the Program **must be documented** by the permittee in a Storm Water Management Program”. The sentence does not make sense (i.e., documenting program elements in a program). Since a written stormwater management plan does not seem to be required, the Division needs to identify how (or in what ways) the permittee must document in writing elements of the program. It is suggested that it may be more appropriate to say the elements of the Program must be documented in the permittee’s NOI, annual reports, and other compliance tracking or reporting tools or documents used by the permittee and kept on file.

4.1 Requirements, 3rd paragraph “The SWMP must include the following information documented in a plan for each of the program elements ...”. The text in bold is confusing if a written plan is not required.

From: Hunt, Michael (WS) <Michael.Hunt@nashville.gov>

Sent: Monday, April 11, 2022 12:09 PM

To: Karina Bynum <Karina.Bynum@tn.gov>

Subject: [EXTERNAL] Small MS4 Draft

Hi Karina, Hope you are doing well these days. I know you all are probably thrilled to finally have the Small MS4 Draft permit out on public notice. I do have one (very) preliminary question after an initial scan of it.

Is the allowance for municipal plan review licensed engineers to let their PE substitute for TNEPSC Level 2 going away? I didn't see the PE substitution mentioned in the draft.

Thanks, Michael

MEMORANDUM

TO: Ariél Wessel-Fuss, DWR Water-Based Systems Unit

FROM: Bryan Carter, DWR Johnson City Environmental Field Office

RE: Draft TNS000000 Small MS4 General Permit Review Comments

DATE: May 13, 2022

I have reviewed the public noticed draft of the Small MS4 general permit and noted the following items. Please note that I did not exhaustively review the draft for grammatical issues but have noted some of the more obvious ones. Let me know if you have questions or wish to discuss these comments further.

1. Permit part 1.3.1.e. references “part 0 of this permit”. However, there is no part 0 contained in the permit.
2. Permit part 3.1.2. appears to be missing a space between “3.1” and “as” in the first sentence.
3. Subpart c. in permit part 3.2.1.1.1. appears to be misplaced because it falls in the middle of the sentence describing subpart b. It appears subpart d. should instead be c., and d. should not exist.
4. Permit part 3.2.1.1.2. contains an italicized word, “*Either*”. It is unclear whether this is intentional. If it is, I recommend also italicizing the word “or” as it introduces the alternative for compliance.
5. Permit part 3.2.1.2.b. references co-permittee liability for “Implementing the six minimum measures...”. However, this appears to be the first time this term appears in the permit and it is unclear what it represents. It appears to be a reference to the Minimum Control Measures required later in permit part 4.2. If this is the case, I recommend that 3.2.1.2.b. be revised to reference part 4.2. for clarity.
6. It is unclear why permit part 3.2.1.1. designates subparts using Arabic numerals but later parts 3.2.1.2 and 3.2.2. designate subparts beginning with lowercase letters. This appears to be an inconsistency in permit formatting.
7. Permit part 3.2.1.2. contains two subparts a. and b. This is confusing and makes it difficult to clearly reference the applicable portion of the permit when identifying compliance deficiencies.
8. Part 3.2.2.b. appears to be missing a space between “5” and “of” in the fourth sentence.

9. I recommend the second paragraph of part 4.1. be revised to insert the word “from” (i.e., “...violations of State water quality criteria of the receiving streams in stormwater runoff *from* the MS4 system.”[Emphasis added]).
10. Permit part 4.2.1.1.b. includes the acronym, SCM, but this abbreviation is not defined until later in permit part 4.2.5.1.b. It is more customary to define terms the first time they appear in a document.
11. Permit part 4.2.3.a. references map requirements in “subpart 0”; however, there is no such subpart in the permit. It appears this should instead reference part 4.2.3.1.
12. The table in permit part 4.2.3. contains a reference to “IDDE” near the bottom of page 25. However, this acronym is not defined until permit part 6.3. Clarity would be improved by defining the acronym where it first appears in the permit.
13. The table in part 4.2.3. contains the following Measurable Goal, “Initiate 100% of all potential illicit discharges investigated within 7 days...” For improved clarity, I recommend changing “investigated” to “investigations”.
14. The table in part 4.2.3. contains the following Measurable Goal, “Permittees must conduct or sponsor a at least one activity each reporting year that foster interagency coordination for hazardous waste or material spills response and cleanup every reporting year.” I recommend the following revisions (noted in red) to this statement, “Permittees must conduct or sponsor ~~a~~at least one activity each reporting year that fosters interagency coordination for hazardous waste or material spills response and cleanup every reporting year.”
15. The table in part 4.2.4. contains an Annual Report Requirement of “% Priority Construction Activities inspected at a frequency of less than once per calendar month.” The way this is worded, a site inspected once per calendar month would not be counted in the annual report percentage but would comply with the associated Measurable Goal. It would be more consistent to word the reporting requirement the same as the goal (i.e., “% Priority Construction Activities inspected at least once per calendar month.”).
16. As written, permit part 4.2.5.2.c. does not allow for use of more recent (than Atlas 14, Volume 2, Version 3.0) precipitation-frequency data if such data become available during the term of the permit. If newer data become available, the permit should allow for its use in stormwater control measure design.
17. Permit part 4.2.5.2.c. allows for exclusion of uncontaminated roof runoff from the required water quality treatment volume (WQTV) required for permanent stormwater management. However, the permit provides no rationale for excluding this runoff volume or criteria for evaluation and determination of whether it is “uncontaminated”, which does not appear to be implicit for the runoff source.

18. Permit part 4.2.5.3.a. includes the statement, “Procedures and requirements in the offsite mitigation and payment in lieu programs should be documented as part of the stormwater management program and available for review.” However, “should” needs to instead be “shall” if this documentation is considered a compliance requirement. This same comment applies to the use of “should” in part 4.2.5.3.b. The last paragraph of that subsection contains requirements for payment amounts into a public stormwater fund; thus, it is implicit that it is intended that such a fund shall be used to fund public mitigation projects.
19. Part 4.2.5.4.d. provides alternatives for average riparian buffer width but does not do so for the minimum riparian buffer widths specified in part 4.2.5.4.b. The permit needs to clearly specify whether reduction in the specified minimum riparian buffer width is allowed in any case and, if so, when and how a reduction is acceptable.
20. Part 4.3.1.b. contains a typographic error. The final sentence should read, “...portions of the ordinance or regulatory mechanism that **are** directly relevant...”
21. Part 4.3.2.d. contains a reference to form CN-1440 and a link to the QLP program website for a copy. However, the QLP website does not contain a direct link to the form in question. It is instead directly linked on the division’s CGP website.
22. Parts 4.4.1.1. and 4.4.1.2. contain requirements regarding minor and major modifications to the stormwater management program and state that public notice is not required. I would expect the need for public notice to be somewhat dependent upon the local legal authority for each small MS4.
23. Part 4.4.1.2. contains typographic errors in the introductory sentences. The first sentence should state, “Major Modifications”, and the third sentence should state, “addressed”.
24. It is unclear why the actions discussed in permit part 4.5.2.a. are only presented as optional (*i.e.*, “should”, “may”). If subpart a. does not contain actual compliance requirements, why is its inclusion in the permit necessary?
25. The heading of the table in part 4.5.5. is not consistently in boldface font.
26. Even though permit part 4.6. and its subparts contain multiple references to publications available online, they do not contain hyperlinks to the cited resources as with other parts of the permit. Providing links to the applicable materials would aid permittees in ensuring compliance.
27. The third paragraph of part 4.6.1.1.1. contains the following statement, “This does not preclude permittees from sampling additional stream segments if designated during the permit term.” However, the final paragraph of the part states, “...the permittee is only required to monitor the stream segments that were designated as unavailable conditions for nutrients, pathogens, and siltation by the Division upon the effective date of this

permit.” The first statement implies that additional segments might be added to monitoring requirements if additional unavailable parameters waterbody segments are identified during the term of the permit; however, the second statement indicates this is not the case. It is unclear whether the second statement is meant to apply only to the visual stream survey requirements in the part or if it also applies to the bacteriological monitoring requirements discussed earlier in this part of the permit.

28. The table in part 4.6.1.4. does not contain any Measurable Goals. Either one or more goals need to be added to the table or that column of the table removed to avoid confusion. The Measurable Goals could be related to actual performance of the required monitoring.
29. The final sentence in part 4.6.1.3. should reference “Electronic Data Deliverable~~s~~”.
30. The final introductory sentence in part 4.7. contains an extraneous permit after the word “permittees”.
31. Permit part 6.1. contains the acronym “NOT”, but this abbreviation is not clearly defined in the permit. This appears to be a reference to Notice of Termination related to coverage under the permit.
32. Parts 6.2., 7.16.2., and Rationale parts 6.1. and 6.2. reference pertinent federal regulations using the acronym, “C.F.R.”. However, the remainder of the permit formats this acronym as “CFR”. The formatting used in the permit should be consistent.
33. The introductory sentence to part 7.19. contains a typographical error which changes the meaning of the sentence. Either the list of authorized representatives is missing an entry or the sentence contains an extraneous “, or,” (“or an authorized representative of the commissioner of TDEC, ~~or~~, upon the presentation of credentials and other documents...”). This needs to be addressed, because, as presented, it alters the intended meaning of the sentence.
34. Part 8.1. does not contain a definition of “1-year 24-hour” even though that is the design storm for water quality treatment imposed in permit part 4.2.5.2.c.
35. The definition of “clearing” in part 8.1. appears to contain a typographical error. The term “cold planning” should instead be “cold planing”.
36. The definition provided for “Terminated” “QLP Status” in part 8.1. does not appear to be contextually accurate. It is related more to a terminated permit coverage than terminated status as a QLP.
37. The definition of “unavailable parameters” in part 8.1. incorrectly limits the permit’s applicability to siltation. However, other portions of the permit indicate broader applicability than only siltation. For example, nutrients from MS4 discharges could be of concern regarding permit compliance.

38. The terms “Tennessee Fundamentals of Erosion Prevention and Sediment Control, (Level 1) And Tennessee Erosion Prevention and Sediment Control Design Course (Level 2)” are indented more so than other entries in permit part 8.3.
39. Rationale parts 5.2. and 5.3. each contain grammatical errors, such as apparent missing words or misplaced punctuation, which negatively impact clarity and readability.
40. Rationale part 6.2. item a. under the “Potential Activities for the Commercial/Industrial Community” heading contains an apparent spelling error. “Suppling materials...” should instead be “Supplying materials...”
41. Rationale part 6.6.1. appears to intermingle discussion of pollution prevention/good housekeeping control measures and management practices with requirements for employee training on these program aspects. It may be beneficial to separate this discussion into subparts to improve clarity.
42. Rationale part 8. references “Part 0” of the permit. However, there is no such part in the body of the permit.
43. The Notice of Intent (NOI) form included as Appendix 1 to the permit includes a purpose statement identifying applicable entities for whom the form is intended. It is unclear whether this is supposed to be an exhaustive list of applicable facilities and, if so, whether it sufficiently incorporated all forms of non-traditional small MS4 entities. This may lead to confusion on the part of some non-traditional entities as to whether this NOI form applies to them.

May 16, 2022

Paul E. Davis, PE
pedh2o@gmail.com

By email 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 for the public record on TDEC's Draft General NPDES Permit for Discharges from Small Municipal Separate Storm Sewer Systems (sMS4s). I appreciate this opportunity to participate and look forward to continuing discussions with agency staff and other interested persons after which I may have further comments.

This is one of the most important permits TDEC will ever issue

It's appropriate to start with a reminder of what was said about MS4 discharges in TDEC's landmark 2018 document, [TNH2O, Tennessee's Roadmap To Securing The Future Of Our Water Resources](#). To quote from page 17 of the Natural Resources Chapter, "MS4 discharges are by far the leading pollution source in Tennessee that is subject to regulation." That was true in 2018 and it's true today.

So it's not surprising that in a recent publication on the condition of Tennessee's waters, TDEC reported 61% of assessed urban waters to be impaired.

This permit will direct our MS4s' implementation of structural and non-structural control measures that reduce pollution from stormwater discharges. It will be in effect for five years. For much of the state, there's every reason to expect much new development and redevelopment during those five years. So it's one of the most important permits TDEC will ever issue. It's vital to Tennessee's future that we get it right.

Post-construction/permanent control requirements need to be strengthened

Substituting impervious roofs, roads, parking areas, walkways and more in place of natural vegetation degrades urban streams. Pollutants wash in and stream channels erode. We've understood for decades that post-construction/permanent controls are our only hope to offset the expansion of the built environment we're now seeing in so many Tennessee cities and counties.

These comments deal mainly with the biggest problem I see in the draft: allowing designers to reduce the volume of water to be treated by post-construction/permanent stormwater control measures.

Pretending roofs don't discharge stormwater

The section titled Permanent Stormwater Standards at Part 4.2.5.2.c., on page 33, contains this sentence: "Uncontaminated roof runoff may be excluded from the WQTV." WQTV stands for Water Quality Treatment Volume, the volume of runoff that must be treated to a certain level. Treatment methods vary in terms of effectiveness, and recognizing that, TDEC's table on page 34 assigns larger WQTVs to the less effective SCMs. The intent, as explained in TDEC's responses to Comments 65 and 80, is to "provide equivalent overall treatment efficiency" between the types of treatment.

By permitting "uncontaminated roof runoff" to be excluded from the WQTV, TDEC allows designers of post-construction stormwater control measures to pretend that some roof area, quite possibly representing much or most of the impervious area at a new development or redevelopment project, simply doesn't produce runoff when it rains.

The roof exclusion seems to have grown out of Comment 63 in [Rule Chapter 0400-40-10, National Pollutant Discharge Elimination System General Permits, Concise Statement of the Principal Reasons for Rulemaking](#). Comment 63 posits that TSS generated by parking lots and roofs are not necessarily the same. It hypothesizes that if 95% of TSS at a development comes from parking lots, then 80% TSS removal for the whole development could be achieved by 84% removal of parking lot TSS and no treatment of roof runoff. That's mathematically correct, a simple mass balance statement dealing exclusively with TSS from two different sources. No other pollutants figured into the commenter's analysis.

With no further explanation and no consideration of other pollutants or the relative volumes of the contributing sources, TDEC responded: "The final rule has been revised to allow permittees to exclude uncontaminated roof runoff from the WQTV calculation." (That sentence is also part of TDEC's responses to Comments 64 and 80.)

The 80% TSS removal standard is a presumptive standard, meaning 80% removal is presumed to be achieved if the SCM is designed, constructed and maintained strictly in keeping with certain recognized specifications. Assuming rain falls evenly, and that the commenter's roofs and parking lots drain in the same direction, excluding impervious roof runoff from the design volume would reduce WQTV, and thus SCM size, by the same fraction (or percentage) that the roof area is of the total impervious area. For example, if the roof area is half of the impervious area at a new development, the SCM would be half the size it would have been but for the exclusion. Even though it receives all the runoff.

Still, provided that it's designed in accordance with specs, Part 4.2.5.2.a. of the permit deems this SCM to reduce pollutants to the Maximum Extent Practicable and to be in compliance with Tennessee's standards for permanent stormwater control. No measure of actual removal of TSS or any other pollutant applies.

Of interest is TDEC's answer to Comment 80. This comment says we're all about TSS removal so why fuss with SCMs that target any other parameters. TDEC's response in this case correctly explains: "TSS removal is not the sole performance criterion. The federal requirement, as reflected in this rulemaking, is to maximize removal of all pollutants to the extent practicable."

It's well understood that, depending on the particular pollutant, coincident pollutant removal is provided by some of the SCMs. Infiltration, for example, results in full removal and biologically active filtration removes of a range of pollutants. This explanation would have helped with Comment 63.

We want pollutants in runoff from all impervious surfaces to be removed to the Maximum Extent Practicable. That requires controls that account for all the impervious area.

There is no "uncontaminated roof runoff" in an urban setting

The term "uncontaminated" has a clear meaning: not contaminated. "Contaminated," according to Merriam-Webster, means "soiled, stained, corrupted, or infected by contact or association."

The National Institutes of Health's PubMed web site has an article titled "[Determining when contamination is pollution - weight of evidence determinations for sediments and effluents.](#)" That article differentiates between "contamination" and "pollution" this way: "Contamination is simply the presence of a substance where it should not be or at concentrations above background. Pollution is contamination that results in or can result in adverse biological effects to resident communities."

Roofs are permanently exposed impervious surfaces. In urban settings, no runoff from exposed impervious surfaces, including roofs, is uncontaminated, much less permanently uncontaminated.

Contaminants – solid and dissolved – come from a range of deposition sources like dust, pollen, wildlife and fallout from combustion, as well as from weathering and decomposition of the roof itself. A Google search will bring up confirming studies such as the following:

An article in the September/October 2008 issue of [Journal of Irrigation and Drainage Engineering](#) titled [Roofing Materials' Contributions to Storm-Water Runoff Pollution](#) reported the results of leaching tests and field studies of several roofing materials. It concluded: "Roofs do not simply collect atmospheric deposition and transport it to the drainage system. They also may, depending on the material's composition and ability to degrade and release pollutants, be a significant source of pollutants in urban runoff."

A 2017 University of Tennessee doctoral dissertation titled "[Drivers of Stormwater Runoff Characteristics from Non-Point Source Urban Pollution](#)" found that bacterial contamination is

common in rooftop runoff. Here's the third among its conclusions: "Bacterial contamination was found to be consistent over the course of a storm for rooftop runoff, especially in the form of *E. coli* and heterotrophic bacteria. This finding elicits a need for rooftop runoff to be treated prior to reuse."

Since uncontaminated roof runoff functionally does not exist, TDEC's proposed draft does not, in fact, allow any roof runoff to be excluded from the volume to be treated. The agency should say so.

The roof exclusion is unworkable

Design precedes construction. Excluding roof area requires that the project designer know in advance that its runoff will be uncontaminated. And since these are to be permanent controls, the designer must know that will be true forever. It's simply not possible.

No other MS4 permit allows exclusion of roofs

I can find no other state, tribe or territory where roofs are allowed to be categorically excluded from post-construction control requirements. No explanation has been offered for Tennessee to authorize significantly less protection of our urban waters than that required by any other permit authority in the country.

Tennessee knows how to protect urban waters

Several MS4s in Tennessee, including those operating under individual as well as general permits, have for a decade or more required post-construction controls. None have allowed exclusion of roof area. Successful implementation in those MS4s, as well as hundreds more in other states, proves that it's entirely practicable to design, construct and maintain stormwater control measures for the whole impervious area. It's already happening.

In 2014 the University of Tennessee produced a design manual, [Tennessee Permanent Stormwater Management and Design Guidance Manual](#), through contract with TDEC, Division of Water Resources. Its stated purpose is "to serve as design guidance and technical reference for designated and non-designated (unregulated) MS4 communities in Tennessee." This is a well-respected reference.

Nothing in that design manual suggests that designers should exclude roof runoff from treatment volume. To the contrary, Section 4.4, titled "Runoff Treatment Volume" (page 52), makes clear that runoff from rooftops is part of the volume that must be treated: "The treatment volume is any runoff generated from the first inch of rainfall from site elements that can potentially contribute pollutants. These areas include impervious surfaces (such as rooftops, pavements, dirt roads, etc.). This is equivalent to the minimum treatment volume for the performance-based criteria for 80% TSS removal. In order to be compliant with treatment requirements, this volume must run through an SCM that is approved for treatment."

The word “uncontaminated” appears nowhere in the entire manual.

The roof exclusion would impermissibly violate EPA rules

The permit rationale accompanying the draft explains at Part 6.5, on Page R-14, that Permit Part 4.2.5, the post-construction/permanent stormwater control part of the permit, incorporates newly adopted rules. That’s true. But it’s my understanding that those rules are not yet fully effective.

It’s also true that this will be an NPDES permit issued under authorization from EPA and it cannot violate federal rules.

EPA rules at 40 CFR 122.34 require that MS4 permits require, at minimum, that MS4s “reduce the discharge of pollutants from [their] discharges to the maximum extent practicable.” And at Part (5) of that section the rule requires that small MS4 permits “must ensure that controls are in place that would prevent or minimize water quality impacts.”

Roofs account for a significant fraction – 90% or more at some sites – of the impervious surface at any new development or redevelopment project. A stormwater treatment measure whose design is based on less impervious drainage area than it will actually receive would be proportionally undersized. That’s less control – 90% less or even worse at some sites – and certainly not control to the Maximum Extent Practicable. And it’s not control that will “prevent or minimize water quality impacts.”

Infiltration-based control measures should not be allowed in the riparian buffer

A second issue with the draft is that it invites placement of controls in infiltration-based riparian buffers.

Stormwater people know that the best control for post-construction runoff is for it to infiltrate into suitable soil or media. They also know that one of the keys to effective infiltration is to prevent the infiltration area from getting blanketed with silt. That’s exactly what can happen when high-water events flood the buffer. And that’s why Metro Stormwater and other MS4s I’m familiar with don’t allow infiltration-based stormwater controls in the buffer area.

But the new draft explicitly allows infiltration-based stormwater control measures in the riparian buffer. In a discussion of preferred vegetation in the buffer zone, Part 4.2.5.4.b. (page 36) states that “riparian buffers may be composed of ... infiltration-based SCMs”; while Part 4.2.5.4.c. (page 37) notes that permittees “may establish permissible land uses or activities within the buffer, [including] infiltration-based SCMs.”

These provisions would lead at best to increased maintenance requirements and more likely to ineffective post construction/permanent controls.

TDEC should support its clean water partners - Tennessee cities and counties

It's not fair to Tennessee cities and counties to put them in the position of defending protective water programs against weak parts of the state permit.

Yes, the roof exclusion is permissive rather than mandatory. And yes, cities and counties could require through local ordinances that infiltration must be located so as to maintain effectiveness. But a decade of hearing from Tennessee MS4s and hundreds more MS4 staff all across the country tells me just how hard it is for them to require protection beyond what their state says is sufficient. Allowing treatment volume to be reduced and inviting placement of infiltration-based controls in riparian buffers do not provide the protection that Tennessee's streams and Tennessee's MS4s deserve.

Other Comments

I've suggested to TDEC (by a separate communication) several minor edits that don't need to be repeated here. The following items, however, I do want to include:

Part 1.3.3.2 – The list of allowable non-stormwater discharges includes “Dechlorinated swimming pool discharges” but makes no mention of saltwater pools. Salt is mentioned as a pollutant of concern at other places in the permit. The permit should make clear that discharges from saltwater pools are not among those allowed.

Part 4.2.4.j. – The term “immediately upstream” needs clarification.

Part 4.2.5.4.e. – I don't think of “top of bank” as being the same as “ordinary high water mark.”

Definitions – The definition of “Waters with unavailable parameters” on page 84 should be modified to align with [Rule 0400-40-03-.06\(2\)](#): “Unavailable parameters exist where water quality is at, or fails to meet, the levels specified in water quality criteria in Rule 0400-40-03-.03, even if caused by natural conditions.”

And finally, I appreciate living in a country where government welcomes critical opinion. I'll be happy to discuss.

Paul E. Davis, PE

TDEC Retiree, 40+ years service

Water Pollution Control Director, 1988-2012

National Stormwater Center Instructor, 2012-Present

Tennessee Stormwater Association Member, 2014-Present



BUILDING AND CODES DEPARTMENT

Phone
931-648-5718

350 Pageant Lane Suite 309
Clarksville, TN 37040

Fax
931-553-5121

5/18/2022

RE: Proposed Small MS4 General Permit Comments

1. The draft permit seems to apply a “one size fits all” approach in that it prescribes BMPs, measurable goals, and reporting deliverables. This is a significant divergence from past permits, which allowed permittees to craft their SWMP around their local stream impairments, citizen complaints, water quality priorities, and water quality goals. This approach does not recognize that inherent differences exist among local governments and their individual capabilities to determine and ensure which BMPs are effective. The Division should refrain from prescribing BMP descriptions and the types, number, and measurable goals for MCMs and instead focus on compliance minimums.
2. The draft permit includes a considerable increase in the level and specificity of required documentation and reporting. Numerous procedures, processes, and plans are identified, as well as an annual solicitor’s certification, SWMP Evaluation Report, and the annual reporting deliverables identified in management measure tables. Some of these items seem unnecessary or redundant (detailed comments will follow). This increase in the level and specificity of required documentation and reporting will require substantially more permittee resources to implement and maintain at a time when permittees are resource-stressed already. The changes will force permittees to focus on getting paperwork done and keeping it updated each year rather than meaningful permit compliance and water quality protection. The Division should re-examine the level and specificity of required documentation and reporting in the draft permit and seek ways to reduce the administrative burden on permittees. For most of the new sub-plans, reports, procedures, and annual reporting requirements in the draft permit, a deadline for implementation is not provided. Does this mean permittees are required to step-up administratively immediately when the permit becomes effective? Given the substantial increase in documentation required by this permit and the potential need to secure additional staff or outside resources to prepare these items, permittees will need significant additional time to budget, plan, and prepare the new plans, reports, and procedures. This is especially true for the upgrade in compliance tracking required in the annual report. This change alone will require permittees to revisit current methods of compliance tracking, determine the changes needed to meet the new permit, coordinate with the departments affected, and allocate funding/resources required to upgrade. As well, the new permit could become effective near the beginning of a municipal fiscal year (July 2022) for many permittees. For these permittees, their FY22-23 budgets do not include funding to deal with such a substantial increase in the

permit's administrative needs. As a result, at least three years from the effective date of the permit may be needed for permittees to budget, plan, and then implement the necessary changes.

3. There are many different, overlapping compliance timeframes in the permit. Can TDEC put together a compliance timeline/checklist for permittees to follow to help avoid the confusion?
4. Throughout the permit, remove the words "all", "any" and 100% as it is all-inclusive and suggests that missing any one element or partial element of the permit, no matter how small or insignificant, would put the permittee at risk for violation of the permit. Specifically, the phrase "100% of all" is used frequently in the "Measurable Goals" column of the permit compliance tables.
5. Section 4.2.5.2.c., on page 33, notes "Uncontaminated roof runoff may be excluded from the WQTV." This sentence should be removed from the permit. If included, the permit would allow designers of post-construction stormwater control measures to pretend that some portion, even the major portion, of impervious surface area simply doesn't produce runoff when it rains. In urban settings, no runoff from impervious surfaces, including roofs, is uncontaminated, much less permanently uncontaminated. Contaminants – solid and dissolved - come from a range of deposition sources like dust, pollen, fallout from combustion, from wildlife... as well as from weathering and decomposition of the roof itself. A Google search will bring up several confirming studies. If maintained, TDEC should provide in the rationale clear scientific evidence that roofs do not contribute detrimentally to runoff and do not deliver pollutants to streams/rivers.
6. Section 4.2.5.4.b and c, on pages 36 and 37, explicitly allows infiltration-based stormwater control measures in the riparian buffer. It is well-accepted that the best control for post-construction runoff is for it to infiltrate into suitable soil or media. Creekside stream buffer areas may be the worst location for infiltration-based stormwater control measures. First, the water table adjacent to a stream would likely prevent any meaningful infiltration, particularly during a storm event. Second, one of the keys to effective infiltration is to keep the infiltration area from getting blanketed with silt. High stormwater flows in buffer areas will surely deliver silt to these practices which will quickly render them ineffective. The permit should not speak to the allowance of these practices in riparian buffers and the local governments should have complete discretion regarding where infiltration-based stormwater practices may be placed.
7. Section 3.1: This section states that TDEC may require an MS4 to create a Corrective Action Plan if stormwater discharges from the MS4 are determined to cause or contribute to an in-stream exceedance of water quality standards. The permit must include the criteria and methodology by which an MS4 can quantitatively determine if its stormwater discharges contribute to an exceedance of the water quality standards that presently are defined only for in-stream water conditions. There are presently no promulgated standards in Tennessee regulating MS4 stormwater discharges for the parameters specified in this section (i.e. nutrients, pathogens, and siltation).

8. Section 3.1.1: This section requires the permittee to implement stormwater pollutant reductions consistent with any applicable Waste Load Allocations (WLA) in a TMDL. The permit must include the acceptable methodology by which an MS4 can quantitatively determine how an MS4's stormwater discharges would impact the in-stream pollutant levels to be reduced according to the WLA TMDL requirements. The WLA in TMDLs are specified only for in-stream concentrations and there are presently no promulgated standards in Tennessee regulating MS4 stormwater discharges for the parameters that could be the subject of a TMDL.
9. Section 3.1.2: This section requires the permittee to implement stormwater pollutant reductions for waters with unavailable parameters that are not subject to a TMDL. The permit must include the acceptable methodology by which an MS4 can quantitatively determine if its MS4 stormwater discharges are significant (i.e. not de minimis) contributors to the impairment. Impairments are defined only for in-stream concentrations and there are presently no promulgated standards in Tennessee limiting MS4 stormwater discharges for possible unavailable parameters.
10. Section 4.1.1, Pg 12: Implementation Plan - Submit implementation plan for permanent stormwater management program 90 days from the Effective Date on the Notice of Coverage. Please make it line up with when our annual reports are due so that we can put them through the same process with our annual report for public meeting. – Recommendation is to say 90 days or when our annual report is due, whichever is later.
11. Section 4.1.1, Pg 12: Implementation Plan – can the State provide a framework or outline of what is expected to be provided in such an implementation plan?
12. Section 4.1.2, Pg 13: The table in this section notes the permit has 18 months to implement changes to regulatory mechanisms. However, the Table in Section 4.2.4, Page 30 gives a 12 month timeline for changes to regulatory mechanisms. This is inconsistent and should be corrected.
13. Section 4.2.1 Public Education & Outreach. Holistic comment on this section. For multiple permit cycles, MS4s have implemented locally derived public education and outreach plans that have been compliant with the NPDES program. This permit is a significant leap forward in the prescriptive nature of the permit, defining very specifically numerous management measures and very specific (but arbitrary) numbers of activities. This approach will likely require a complete overhaul of local government outreach programs to ensure compliance with every single element of these sections. Is that TDECs intent? If not, can this section be structured such that local governments have more flexibility to continue implementing programs that already cover these management measures more broadly? TDEC still maintains the authority to review the PIE and make adjustments through audits to verify that the intent of the permit is being met without burdening all permittees with a very prescriptive list of requirements.
14. Section 4.2.1 Public Education & Outreach. Can the State clarify the Measurable Goals in the tables of this section? The permit says “conduct and/or sponsor a minimum number of activities that address each of the issues identified under management measures...” It goes on to list the associated number of activities. Section 4.2.1.1 has 5 bullet points under “Management Measure.” Is a permittee with less than 25,000 (as an example) required to conduct 3 activities per management measure (thus, $3 \times 5 = 15$ activities),

OR can they conduct 3 activities that include all 5 of the management measure topics? If the former example is desired, TDEC should consider the feasibility of such small MS4s having the resources and staff to conduct numerous activities. This is only one of three categories in this section so the number of required activities would grow significantly.

15. Section 4.2.1.1: What level of involvement distinguishes collaborating from sponsoring in a MCM1/MCM2 activity? Is collaboration between 2 or more MS4's considered a sponsored event?
16. Section 4.2.1 and 4.2.2: Related to Public Outreach and Public Involvement, can one event have multiple "activities" within it and thus achieve the requirements of both Public Education and Outreach and Public Involvement/ Participation as discussed in section 4.2.1 & 4.2.2?
17. Section 4.2.3, Page 24, d.: Please define "Significant" as it pertains to this section.
18. Section 4.2.3 Page 25: Please elaborate on how to comply with the annual reporting requirements of "% of non-stormwater discharges or flow investigated as a significant contributor of pollutants to the MS4". What denominator is used to find this percentage? Also please define "significant" as it pertains to this section.
19. Section 4.2.3 Illicit Discharge Detention and Elimination. Page 26. Multiple boxes in this Table speak to compliance in 100% of all circumstances. Based on the experience of implementing an IDDE program, a permittee may not always be able to determine the source and discharger for a confirmed illicit discharge. So, being able to initiate enforcement and/or receive corrective action plans for 100% of confirmed issues may not always be possible. The table should be modified to allow for exceptions when due diligence is performed so that the permittee does not have compliance liability if they cannot readily identify a source or discharger.
20. Section 4.2.5: Please add a definition for "Stormwater Control Measures (SCMs)", specifically covering how the term pertains to section 4.2.5 of the draft permit.
21. Section 4.2.5.2, page 33, item b. Please clarify "information relevant" and "readily available" in the following statement: "Information relevant to identified SCMs should be made readily available."
22. Section 4.2.5.2, page 33, item b.: Please define "Significantly limit" as it pertains to the following statement: "If the permittee decides to significantly limit the number of SCM options it must be documented in the stormwater management program how the performance standards of Tennessee Rule 0400-40-10-.04 can be met with the limited set of control measures that are allowed."
23. Section 4.2.5.6. TDEC should not be dictating the specific elements of the Plan Review and installation verification process, as the process is different across all communities and varies widely based on the size of the community, the resources/staff available, amount of development occurring, etc. The permit needs to only say "each MS4 must document the process for performing plan review and verification of appropriate installation."

24. Section 4.2.5.9, Page 42 - Establish a time frame for review of all plans and review 100% of all plans within that timeframe – I don't know why TDEC should make MS4s set a timeframe for plans review process for our communities. This is completely unnecessary and each MS4 should be able to decide how their process works. If a process is in place, then the MS4 is meeting the intent. What regulation gives TDEC the authority to regulate the time frame for local governments to perform plan reviews?
25. Section 4.6.1.1.1 On Page 55 the draft states "Adopt existing survey protocols such as the ones available through the Natural Resources Conservation Service, State of Maryland Department of Natural Resources, and/or the State of Tennessee Habitat Assessment Protocol and related Stream Survey Field Sheets; or...". Please provide references to the survey protocols listed here.
26. Section 4.6.1.1.1 on page 55 the draft states that the permittee may Develop their own protocol which must address 14 Visual Survey Assessment elements: (Channel Condition, Hydrologic Alteration, Bank Condition, Riparian Area Condition, Canopy Cover, Water Appearance, Nutrient Enrichment, Animal Or Human Waste Presence, Pools, Barriers, Fish Habitat Complexity, Invertebrate Habitat, Invertebrate Community, Riffle Embeddedness, Other as defined by the permittee) Must all 14 elements listed above be assessed in each stream?
27. Section 4.6.1.1.2 on page 56 please clarify the statement (item e.) "Utilize Division protocols identified above in Option 1 or protocols approved by the Division for instream monitoring." Which protocols in option is TDEC referring to?
28. Please clarify Section 4.6.1.1.2 on page 57 item h: "Provisions for an administratively continued small MS4 general permit." If the MS4's monitoring plan is for one permit cycle, could the provisions for an administratively continued permit be "ensure the monitoring is complete for the permit cycle"?
29. Please provide a definition for "wet weather screening" as it pertains to section 4.6.2 item b. (Page 59).

Respectfully Submitted,

John H Doss

John H. Doss, MA, CPESC, CFM
Stormwater Coordinator
Montgomery County, TN

From: [Ariel Wessel-Fuss](#)
To: [Liz Campbell](#)
Subject: FW: [EXTERNAL] Small MS4 General Permit Comment
Date: Tuesday, May 17, 2022 4:29:50 PM

From: Mary Beth Sutton <marybeth@mywaterways.org>
Sent: Tuesday, May 17, 2022 2:54 PM
To: Ariel Wessel-Fuss <Ariel.Wessel-Fuss@tn.gov>
Subject: [EXTERNAL] Small MS4 General Permit Comment

***** This is an EXTERNAL email. Please exercise caution. DO NOT open attachments or click links from unknown senders or unexpected email - STS-Security. *****

Hi Ariel,

I would like to comment on two particular pieces of the proposed Small MS4 permit.

"Uncontaminated roof runoff may be excluded from the WQTV." First, No rainwater coming off a roof is completely uncontaminated. Would YOU drink it? . It also contributes immensely to stormwater runoff issues, CAUSING contamination. Removing it from calculations of runoff volume will only exacerbate issues caused by stormwater runoff in our streams. That line should be deleted.

In addition, allowing "infiltration-based stormwater control measures in the riparian buffer" will simply not work. They will not function correctly. The riparian buffer is the area where the water table is the highest and therefore additional water will not infiltrate. These areas are also likely to be flooded and blanketed with silt. The silt will clog any infiltration based SCM which will then cease to function at all. SCM's based on infiltration should not be allowed in flood prone, riparian zones.

Please let me know if you have any questions.

Respectfully,

--

Mary Beth H. Sutton
Executive Director
(423)413-0471



mywaterways.org

Comments on Small MS4 General Permit (NPDES Permit TNS000000)

Submitted by: Urban Stormwater Control Measures Workgroup of the Tennessee Nutrient Reduction Taskforce

The Urban Stormwater Control Measures Workgroup suggests making modifications to section ***“4.2.5.8 Inventory and Tracking of Permanent Stormwater Control Measure Assets”*** to enable the collection of additional data for future assessment of potential nutrient reduction by permanent stormwater control measures (SCMs). The recommended modifications are indicated below:

1. It is recommended that TDEC include specific language to indicate that the inventory and tracking system shall be a searchable electronic database that retrieves SCM information by location or other similar identification. A searchable electronic geodatabase is preferred. Paper-based database cannot be effectively used to the evaluation SCM performance.
2. Location of SCMs should include latitude and longitude.
3. Under “.....the system should include information and records the permittee will use to demonstrate that SCMs are properly maintained, including but not limited to:”, it is recommended to consider the addition of the following information:
 - Drainage area of each SCM
 - Design criteria used for designing/sizing each SCM. Reference to manuals or design documents can be accepted.
 - Name of receiving stream or HUC unit (12 or 8) for each SCM
 - Summary of monitoring data or SCM water quality data, if any
 - Planned inspection and maintenance schedule of each SCM
 - Description of maintenance procedure
4. Under section ***“4.2.6 Pollution Prevention/Good Housekeeping”***, it is recommended that TDEC receive information from permittees where street sweeping is performed. Data on miles of lanes swept, loads of leaves collected, and frequency of street sweeping shall be made available to TDEC for evaluation.
5. It is recommended that TDEC receive available information pertaining to fertilizer use to maintain SCMs such as location and frequency of fertilizer use, type of fertilizer, and amount of fertilizer used.



Memorandum

*To: Tennessee Department of Environment and Conservation
Division of Water Resources
Attention: Ariel Wessel-Fuss*

From: Tennessee Stormwater Association

Date: May 23, 2022

Subject: Compilation of TNSA Member Comments Submitted on Proposed Draft Small MS4 General Permit

The TNSA Policy Committee solicited review comments from TNSA members on the Proposed Draft Small MS4 General Permit. The comments received are provided below and are submitted here on behalf of our large and diverse membership. Should you have any questions or wish to discuss these comments with TNSA, please do not hesitate to contact us.

GENERAL COMMENTS

- The draft permit seems to apply a “one size fits all” approach in that it prescribes BMPs, measurable goals, and reporting deliverables. This is a significant divergence from past permits, which allowed permittees to craft their SWMP around their local stream impairments, citizen complaints, water quality priorities, and water quality goals. This approach does not recognize that inherent differences exist among local governments and their individual capabilities to determine and ensure which BMPs are effective. The Division should refrain from prescribing BMP descriptions and the types, number, and measurable goals for MCMs and instead focus on compliance minimums.
- The draft permit includes a considerable increase in the level and specificity of required documentation and reporting. Numerous procedures, processes, and plans are identified, as well as an annual solicitor’s certification, SWMP Evaluation Report, and the annual reporting deliverables identified in management measure tables. Some of these items seem unnecessary or redundant (detailed comments will follow). This increase in the level and specificity of required documentation and reporting will require substantially more permittee resources to implement and maintain at a time when permittees are resource-stressed already. The changes will force permittees to focus on getting paperwork done and keeping it updated each year rather than meaningful permit compliance and water quality protection. The Division should re-examine the level and specificity of required documentation and reporting in the draft permit and seek ways to reduce the administrative

burden on permittees. For most of the new sub-plans, reports, procedures, and annual reporting requirements in the draft permit, a deadline for implementation is not provided. Does this mean permittees are required to step-up administratively immediately when the permit becomes effective? Given the substantial increase in documentation required by this permit and the potential need to secure additional staff or outside resources to prepare these items, permittees will need significant additional time to budget, plan, and prepare the new plans, reports, and procedures. This is especially true for the upgrade in compliance tracking required in the annual report. This change alone will require permittees to revisit current methods of compliance tracking, determine the changes needed to meet the new permit, coordinate with the departments affected, and allocate funding/resources required to upgrade. As well, the new permit could become effective near the beginning of a municipal fiscal year (July 2022) for many permittees. For these permittees, their FY22-23 budgets do not include funding to deal with such a substantial increase in the permit's administrative needs. As a result, at least three years from the effective date of the permit may be needed for permittees to budget, plan, and then implement the necessary changes.

- There are many different, overlapping compliance timeframes in the permit. Can TDEC put together a compliance timeline/checklist for permittees to follow to help avoid the confusion?
- Throughout the permit, remove the words “all”, “any” and 100% as it is all-inclusive and suggests that missing any one element or partial element of the permit, no matter how small or insignificant, would put the permittee at risk for violation of the permit. Specifically, the phrase “100% of all” is used frequently in the “Measurable Goals” column of the permit compliance tables.

HOT BUTTON TECHNICAL ISSUES

- Section 4.2.5.2.c., on page 33, notes “Uncontaminated roof runoff may be excluded from the WQTV.” This sentence should be removed from the permit. If included, the permit would allow designers of post-construction stormwater control measures to pretend that some portion, even the major portion, of impervious surface area simply doesn't produce runoff when it rains. In urban settings, no runoff from impervious surfaces, including roofs, is uncontaminated, much less permanently uncontaminated. Contaminants – solid and dissolved - come from a range of deposition sources like dust, pollen, fallout from combustion, from wildlife... as well as from weathering and decomposition of the roof itself. A Google search will bring up several confirming studies. If maintained, TDEC should provide in the rationale clear scientific evidence that roofs do not contribute detrimentally to runoff and do not deliver pollutants to streams/rivers.
- Section 4.2.5.4.b and c, on pages 36 and 37, explicitly allows infiltration-based stormwater control measures in the riparian buffer. It is well-accepted that the best control for post-construction runoff is for it to infiltrate into suitable soil or media. Creekside stream buffer

areas may be the worst location for infiltration-based stormwater control measures. First, the water table adjacent to a stream would likely prevent any meaningful infiltration, particularly during a storm event. Second, one of the keys to effective infiltration is to keep the infiltration area from getting blanketed with silt. High stormwater flows in buffer areas will surely deliver silt to these practices which will quickly render them ineffective. The permit should not speak to the allowance of these practices in riparian buffers and the local governments should have complete discretion regarding where infiltration-based stormwater practices may be placed.

DETAILED COMMENTS

- Section 3.1: This section states that TDEC may require an MS4 to create a Corrective Action Plan if stormwater discharges from the MS4 are determined to cause or contribute to an in-stream exceedance of water quality standards. The permit must include the criteria and methodology by which an MS4 can quantitatively determine if its stormwater discharges contribute to an exceedance of the water quality standards that presently are defined only for in-stream water conditions. There are presently no promulgated standards in Tennessee regulating MS4 stormwater discharges for the parameters specified in this section (i.e. nutrients, pathogens, siltation).
- Section 3.1.1: This section requires the permittee to implement stormwater pollutant reductions consistent with any applicable Waste Load Allocations (WLA) in a TMDL. The permit must include the acceptable methodology by which an MS4 can quantitatively determine how an MS4's stormwater discharges would impact the in-stream pollutant levels to be reduced according to the WLA TMDL requirements. The WLA in TMDLs are specified only for in-stream concentrations and there are presently no promulgated standards in Tennessee regulating MS4 stormwater discharges for the parameters that could be the subject of a TMDL.
- Section 3.1.2: This section requires the permittee to implement stormwater pollutant reductions for waters with unavailable parameters that are not subject to a TMDL. The permit must include the acceptable methodology by which an MS4 can quantitatively determine if its MS4 stormwater discharges are significant (i.e. not de minimis) contributors to the impairment. Impairments are defined only for in-stream concentrations and there are presently no promulgated standards in Tennessee limiting MS4 stormwater discharges for possible unavailable parameters.
- Section 4.1.1, Pg 12. Implementation Plan - Submit implementation plan for permanent stormwater management program 90 days from the Effective Date on the Notice of Coverage. Please make it line up with when our annual reports are due so that we can put them through the same process with our annual report for public meeting. – Recommendation is to say 90 days or when our annual report is due, whichever is later.

- Section 4.1.1, Pg 12. Implementation Plan – can the State provide a framework or outline of what is expected to be provided in such an implementation plan?
- Section 4.1.2, Pg 13 The table in this section notes the permit has 18 months to implement changes to regulatory mechanisms. However, the Table in Section 4.2.4, Page 30 gives a 12 month timeline for changes to regulatory mechanisms. This is inconsistent and should be corrected.
- Section 4.2.1 Public Education & Outreach. Holistic comment on this section. For multiple permit cycles, MS4s have implemented locally derived public education and outreach plans that have been compliant with the NPDES program. This permit is a significant leap forward in the prescriptive nature of the permit, defining very specifically numerous management measures and very specific (but arbitrary) numbers of activities. This approach will likely require a complete overhaul of local government outreach programs to ensure compliance with every single element of these sections. Is that TDECs intent? If not, can this section be structured such that local governments have more flexibility to continue implementing programs that already cover these management measures more broadly? TDEC still maintains the authority to review the PIE and make adjustments through audits to verify that the intent of the permit is being met without burdening all permittees with a very prescriptive list of requirements.
- Section 4.2.1 Public Education & Outreach. Can the State clarify the Measurable Goals in the tables of this section? The permit says “conduct and/or sponsor a minimum number of activities that address each of the issues identified under management measures...” It goes on to list the associated number of activities. Section 4.2.1.1 has 5 bullet points under “Management Measure.” Is a permittee with less than 25,000 (as an example) required to conduct 3 activities per management measure (thus, $3 \times 5 = 15$ activities), OR can they conduct 3 activities that include all 5 of the management measure topics? If the former example is desired, TDEC should consider the feasibility of such small MS4s having the resources and staff to conduct numerous activities. This is only one of three categories in this section so the number of required activities would grow significantly.
- Section 4.2.1.1 What level of involvement distinguishes collaborating from sponsoring in a MCM1/MCM2 activity? Is collaboration between 2 or more MS4’s considered a sponsored event?
- Section 4.2.1 and 4.2.2 Related to Public Outreach and Public Involvement, can one event have multiple “activities” within it and thus achieve the requirements of both Public Education and Outreach and Public Involvement/ Participation as discussed in section 4.2.1 & 4.2.2?
- Section 4.2.3, Page 24, d.: Please define “Significant” as it pertains to this section.

- Section 4.2.3 Page 25: Please elaborate on how to comply with the annual reporting requirements of “% of non-stormwater discharges or flow investigated as a significant contributor of pollutants to the MS4”. What denominator is used to find this percentage? Also please define “significant” as it pertains to this section.
- Section 4.2.3 Illicit Discharge Detention and Elimination. Page 26. Multiple boxes in this Table speak to compliance in 100% of all circumstances. Based on the experience of implementing an IDDE program, a permittee may not always be able to determine the source and discharger for a confirmed illicit discharge. So, being able to initiate enforcement and/or receive corrective action plans for 100% of confirmed issues may not always be possible. The table should be modified to allow for exceptions when due diligence is performed so that the permittee does not have compliance liability if they can not readily identify a source or discharger.
- Section 4.2.5 Please add a definition for “Stormwater Control Measures (SCMs)”, specifically covering how the term pertains to section 4.2.5 of the draft permit.
- Section 4.2.5.2, page 33, item b. Please clarify “information relevant” and “readily available” in the following statement: “Information relevant to identified SCMs should be made readily available.”
- Section 4.2.5.2, page 33, item b.: Please define “Significantly limit” as it pertains to the following statement: “If the permittee decides to significantly limit the number of SCM options it must be documented in the stormwater management program how the performance standards of Tennessee Rule 0400-40-10-.04 can be met with the limited set of control measures that are allowed.
- Section 4.2.5.6. TDEC should not be dictating the specific elements of the Plan Review and installation verification process, as the process is different across all communities and varies widely based on the size of the community, the resources/staff available, amount of development occurring, etc. The permit needs to only say “each MS4 must document the process for performing plan review and verification of appropriate installation.”
- Section 4.2.5.9, Page 42 - Establish a time frame for review of all plans and review 100% of all plans within that timeframe – I don’t know why TDEC should make MS4s set a timeframe for plans review process for our communities. This is completely unnecessary and each MS4 should be able to decide how their process works. If a process is in place, then the MS4 is meeting the intent. What regulation gives TDEC the authority to regulate the time frame for local governments to perform plan reviews?
- Section 4.6.1.1.1 On Page 55 the draft states “Adopt existing survey protocols such as the ones available through the Natural Resources Conservation Service, State of Maryland Department of Natural Resources, and/or the State of Tennessee Habitat Assessment Protocol and related

Stream Survey Field Sheets; or...". Please provide references to the survey protocols listed here.

- Section 4.6.1.1.1 on page 55 the draft states that the permittee may Develop their own protocol which must address 14 Visual Survey Assessment elements: (Channel Condition, Hydrologic Alteration, Bank Condition, Riparian Area Condition, Canopy Cover, Water Appearance, Nutrient Enrichment, Animal Or Human Waste Presence, Pools, Barriers, Fish Habitat Complexity, Invertebrate Habitat, Invertebrate Community, Riffle Embeddedness, Other as defined by the permittee) Must all 14 elements listed above be assessed in each stream?
- Section 4.6.1.1.2 on page 56 please clarify the statement (item e.) "Utilize Division protocols identified above in Option 1 or protocols approved by the Division for instream monitoring." Which protocols in option is TDEC referring to?
- Please clarify Section 4.6.1.1.2 on page 57 item h: "Provisions for an administratively continued small MS4 general permit." If the MS4's monitoring plan is for one permit cycle, could the provisions for an administratively continued permit be "ensure the monitoring is complete for the permit cycle"?
- Please provide a definition for "wet weather screening" as it pertains to section 4.6.2 item b. (Page 59).

From: Ariel Wessel-Fuss
Sent: Thursday, May 19, 2022 2:47 PM
To: Liz Campbell
Subject: Fw: [EXTERNAL] General NPDES Permit for discharges from Small Municipal Separate Storm Sewer Systems Permit Number TNS100000

Ariel Wessel-Fuss
Environmental Protection Specialist
Division of Water Resources

Division of Water Resources
William R. Snodgrass Tennessee Tower
312 Rosa L. Parks Avenue, 11th Floor
Nashville, Tennessee 37243

Office: (615) 532-0642
Fax: (615) 532-0686
Email: Ariel.Wessel-Fuss@tn.gov

From: Alan Leiserson <aleiserson80@gmail.com>
Sent: Thursday, May 19, 2022 2:45 PM
To: Ariel Wessel-Fuss <Ariel.Wessel-Fuss@tn.gov>
Subject: [EXTERNAL] General NPDES Permit for discharges from Small Municipal Separate Storm Sewer Systems Permit Number TNS100000

Ariel,
Hi. I hope you are doing well.

This email is my comment on the referenced general permit. Thank you for considering it.

For the reasons stated in the May 16 comment by Paul Davis, I urge you to remove the exclusion for "uncontaminated roof runoff" from the WQTV in the section titled Permanent Stormwater Standards at Part 4.2.5.2.c., on page 33.

While I support the statement of Paul Davis, I would just say here that it does not seem possible that a person designing the permanent treatment system before the project is built can know if the roof runoff is actually contaminated. Therefore this provision seems to have embedded in it an assumption, which in an urban area appears to be inaccurate based on the citations in Davis's comment.

Also it appears from Davis's comment that Tennessee would be doing something that no other state has done if it excludes roof runoff from the calculation. Although that might be appropriate in some situations, this is not one.

Thanks again for the opportunity to comment,
Alan Leiserson

From: Ariel Wessel-Fuss
Sent: Thursday, May 19, 2022 2:40 PM
To: Liz Campbell
Subject: Fw: [EXTERNAL] TNS000000 comments

Ariel Wessel-Fuss
Environmental Protection Specialist
Division of Water Resources

Division of Water Resources
William R. Snodgrass Tennessee Tower
312 Rosa L. Parks Avenue, 11th Floor
Nashville, Tennessee 37243

Office: (615) 532-0642
Fax: (615) 532-0686
Email: Ariel.Wessel-Fuss@tn.gov

From: Cindy <cindy.whitt@comcast.net>
Sent: Thursday, May 19, 2022 2:10 PM
To: Ariel Wessel-Fuss <Ariel.Wessel-Fuss@tn.gov>
Subject: [EXTERNAL] TNS000000 comments

Ms. Wessel-Fuss,

As a 15 year resident of the City of Franklin, TN, I would like to provide some comments on this new draft permit for stormwater sewer systems of small cities.

Small cities in TN are experiencing rapid, high density residential growth and predictions are the growth will continue. This places stress on existing systems and new development must consider the incremental and cumulative impact of this stress. Weather is becoming more extreme and unpredictable and our scientists think this will continue. Both factors make strong controls over future development a major factor in our quality of life and safety.

This new permit has several areas which require revision to ensure quality of life and safety of Tennesseans:

1. Roofs are a major contributing factor to stormwater runoff. Most roofs concentrate water and then release it onto streets or sidewalks at high velocity. This concentrated flow then travels with the rainwater hitting concrete and into the storm sewers. In addition to contamination on the roof, it picks up additional contaminants along its journey to the storm sewers. It should be detained just as any stormwater.
2. Post-construction controls are where I see much potential for of harmful impacts. Controls only work when they are properly maintained and emphasis in this area is needed. Funding should be set up to cover the costs required for future maintenance and construction and maintenance bonds should be extended for longer terms.
3. Riparian buffer zones should be protected from stormwater runoff as the pollution carried by this runoff is concentrated and current buffer zones will not be sufficient for protection.

Thanks for the opportunity to comment and your work to maintain our quality of life and safety.

Cindy Whitt

305 White Moss Place

Franklin, TN 37064

Sent from my iPad

From: Ariel Wessel-Fuss
Sent: Thursday, May 19, 2022 2:40 PM
To: Liz Campbell
Subject: Fw: [EXTERNAL] TNS000000 issue National Pollutant Discharge Elimination System (NPDES) permits

Ariel Wessel-Fuss
Environmental Protection Specialist
Division of Water Resources

Division of Water Resources
William R. Snodgrass Tennessee Tower
312 Rosa L. Parks Avenue, 11th Floor
Nashville, Tennessee 37243

Office: (615) 532-0642
Fax: (615) 532-0686
Email: Ariel.Wessel-Fuss@tn.gov

From: Mike Sizemore <mikesizemore@comcast.net>
Sent: Thursday, May 19, 2022 2:24 PM
To: Ariel Wessel-Fuss <Ariel.Wessel-Fuss@tn.gov>
Subject: [EXTERNAL] TNS000000 issue National Pollutant Discharge Elimination System (NPDES) permits

Good afternoon,

I felt the necessity to respond after reviewing the proposed changes in this Permit. Allowing developers/designers to ignore the problems caused by roof stormwater runoff and remove roof runoff from the design equation will lead to more pollution of Tennessee's valuable water systems.

It seems like your agency's charter would be to strengthen the Stormwater Control measures rather than bend to the whims of developers and designers who may not even be residents of TN.

Please reevaluate your positions on this Permit and protect the future generations of Tennesseans.

Regards,
Mike Sizemore



City of Bartlett

A. KEITH McDONALD, Mayor

ENGINEERING & UTILITIES

W. R. McCLANAHAN - Director and City Engineer

JOHN HORNE - Assistant City Engineer

May 20, 2022

Tennessee Department of Environment and Conservation

Division of Water Resources

ATTN: Ariel Wessel-Fuss

William R. Snodgrass Tennessee Tower

312 Rosa Parks Avenue

11th Floor

Nashville TN 37243-1102

RE: March 22, 2022 Draft NPDES General Small MS4 Permit Comments

Dear Ms. Wessel-Fuss:

The attached document represents specific comments on the draft Small MS4 Permit released for public comment March 22, 2022. In addition to those specific comments, we are also providing some general observations and concerns for the Department's consideration.

First, Phase II MS4s located in the metropolitan area of Memphis currently have a settlement agreement with the Department concerning permanent stormwater management. Although the rationale included with the draft mentions this, we believe it is in our best interest, legally, that the language of that agreement (or reference to) be included in the permit language, not just the rationale.

Secondly, there are numerous requirements in this permit that are not required by the Clean Water Act or other federal laws as well as numerous instances where this draft permit exceeds the requirements the EPA includes in the permits EPA issues to small MS4s. In many cases, requirements contained in this permit are only recommendations or guidance in the EPA issued permits. Still others are not alluded to in 40 CFR 122.34 at all. Although requirements may appear to be just words on paper, every requirement represents an unfunded cost to the small MS4 that our taxpayers must ultimately pay. While we recognize its importance, improved water quality is costly. Those costs can, and should, be kept lower by our State not requiring more of the small MS4s they oversee. The requirements should be no more than the EPA requires.

Lastly, there were several stakeholder meetings in 2021 that specifically addressed monitoring requirements. With few exceptions, the general consensus of the stakeholders was that the monitoring requirements contained in the current permit, Option 2, was adequate for the small MS4. It appears that TDEC has decided to expand not only the Option 1 requirements but also Option 2 monitoring requirements even though they have no legal basis for them. We specifically address those concerns in our attached comments and object to the draft permit attempt to justify

such monitoring as illicit discharge detection and elimination as well as a way of assessing program effectiveness. TDEC's rationales for monitoring contained in the rationale sheet goes far beyond those two reasons and are probably more accurate in their justification for TDEC's apparent decision to disregard stakeholder input on this area of control. We wish to emphasize here, in addition to our specific comments, that stream monitoring requirements expounded upon in this draft permit have no legitimate application to a permittee and should be removed from permit language, specifically when they apply to pollutants of concern which have no TMDLs.

We all recognize that the ultimate goal of any stormwater program is improved water quality. But we also recognize that improving water quality comes with a cost. We hope to continue to work with TDEC to move towards achieving improved water quality by utilizing methods that achieve that quality at the lowest costs. We believe the comments we have provided here and in the specific comments attached moves us in that direction.



W.R. McClanahan, PE
City Engineer

Attachments:

City of Bartlett Draft NPDES General Permit for Small MS4 Comments

City of Bartlett

2022 Draft Phase II MS4 Permit Comments

General Comments

As we have said in the past and do so again now, this permit requires a multitude of requirements that go beyond the requirements of 40 CFR 122.34 Permit Requirements for Regulated Small MS4s. §122.34(b)(1) states “The permit should encourage the permittee to tailor outreach programs to address viewpoints and concerns of all communities...”. This general permit put out for public comment requires all permittees to address concerns that may not exist in their communities. §122.34(b)(3)(iii) states “the permit require the permittee visually screen outfalls during dry weather and conduct field tests of selected pollutants...” The monitoring portion of this permit goes well beyond conducting field tests of selected pollutants. Option 1 even requires sampling for aquatic life. In the area of post construction, §122.34(b)(5)(ii) states that BMPs included in the program should be appropriate for local communities and does not mention any minimum treatment volumes. Nor does it require the MS4 to inspect private facilities. §122.34(b)(6) does not specify a minimum training schedule for employees nor is one recommended in the EPA guidance included.

The State also is very concerned about having input into the permit yet, when this permit was developed, no MS4, which is the very agencies having to enforce this permit, was included in the development or asked to provide input into the creation of this document. The document only has the myopic views of the State regulators and does not contain diversity of views necessary to create a program which is sustainable by the MS4 to meet clean water standards and comply with EPA requirements. Effectively the permit is setting the local agency up to fail with the myriad of requirements which have nothing to do with clean water and only address bureaucratic reporting requirements that have little or no substantiated impact on water quality. TDEC may argue that the comment period is the time to address those issues, however in the 30 years of commenting to TDEC on their permits in the rule making process or commenting on their actions little if any changes occurred due to those comments so it would appear that the MS4 inputs were and are totally disregarded and completely discounted with no changes in the permits eventually issued. This neglect of the need for diversity of comments should be recognized by TDEC as a shortcoming and certainly, in this permit or future permits, a group of stakeholders including the MS4s, should be established to work through the issues and provide input on the permit well before it even gets to this level.

Numerous internet links embedded in the draft did not function.

City of Bartlett
2022 Draft Phase II MS4 Permit Comments

Section 1.3.1 Authorization to discharge

Subpart e, first line – reference to part 0 of the permit. This part does not exist.

Section 1.3.3.2 Non-stormwater discharges

Fifth bullet, line 2 – Add the word “storm” before the word “sewer” (two places).

Uncontaminated ground water infiltration (infiltration is defined as water other than wastewater that enters a *storm* sewer system, including *storm* sewer service connections and foundation drains, from the ground through such means as defective pipes, pipe joints, connections, or manholes. Infiltration does not include, and is distinguished from, inflow.)

Section 1.4 Limitations of Coverage

Comment 1 – Replace language in bullet 1.4(b)

As written, this permit limitation would appear to prohibit storm water discharges associated with industrial activities into the MS4 system. We realize it could not be TDEC’s intent to prohibit such discharges into the MS4 system. We therefore request the language be clarified to reflect that while the small MS4 permit is not deemed an NPDES permit for the discharge of industrial storm water issued to a facility under 40 CFR §122.26(b)(14), the small MS4 permit does authorize the receipt of such discharges by the municipality and the subsequent discharge of it through the MS4. Accordingly, we request the language be replaced as follows:

Permitted stormwater discharges associated with industrial activities, as defined in 40 CFR §122.26(b)(14) *as such discharge into the MS4 system requires the discharger to have individual or general NPDES permit coverage. Notwithstanding any provisions to the contrary, this permit does authorize the receipt and subsequent discharge by the small MS4 of the storm water associated with industrial facilities.* Stormwater discharges from certain construction related industrial activities, as defined along with other construction activities in this permit, are excluded from this limitation.

City of Bartlett

2022 Draft Phase II MS4 Permit Comments

Comment 2 – Modify language in bullet 1.4(d).

We are concerned with the “contribute to” language. The “contribute to” language was purposely removed from TDEC regulations with such intent clearly evidenced in rulemaking response to comments. It should also be noted that case law specifically determined that liability can only be imposed for causing a violation, not “contributing to” a violation. We request that the “or contribute to” language be removed from this section as well as anywhere else it may appear in the permit.

Discharges that would cause ~~or contribute to~~⁺ an in-stream exceedance of water quality standards.

Comment 3 – Recognize a phased process in bullet 1.4(e) or delete 1.4(e)

The permit should recognize a phased process to achieving water quality standards. This section, as written, prohibits the discharge of any pollutants in violation of a specific waste load allocation. As a waste load allocation provides for phased implementation of water quality standards, the permit should recognize this phased process to afford small MS4s the opportunity to work diligently towards achieving water quality standards over one or more permit cycles, particularly in regards to TMDL implementation plans. With this in mind, we recommend that the bullet be deleted or the language changed to reflect the use of BMPs:

Discharges of stormwater-borne pollutants at levels that would ~~be in violation of~~ *exceed* a specific wasteload allocation (WLA) applicable to ~~the small MS4 permits and~~ as defined in the implementation plan contained in an EPA approved or established Total Maximum Daily Load. *Such discharges are authorized when the permittee has controls in place that are reasonably expected to eventually achieve the water quality standard specified for the TMDL.*

Comment 4 – subparagraph f.

Recommend this paragraph be deleted. As written, this paragraph would leave the permittee open to possible third party litigation. While a spill response can usually be handled by emergency responders, the permittee has little control over spills that occur when they are not made aware of the spill. These types of spills should be treated as illicit discharges by the permittee.

City of Bartlett

2022 Draft Phase II MS4 Permit Comments

~~h. Discharges of materials resulting from a spill within the jurisdiction of the MS4, except emergency discharges required to prevent imminent threat to human health or to prevent severe property damage, provided reasonable and prudent measures have been taken to minimize the impact of the discharges.~~

Section 1.5 Obtaining Authorization

Comment 1 – first paragraph, line 3. Change subpart 2.1 to part 2. Part 2 is the NOI requirements where subpart 2.1 just addresses deadlines.

Comment 2 – third paragraph, line 6. Subpart 7.11 is signatory requirements and does not address applications for individual permits.

Section 3.1 Discharges to Waterbodies with Unavailable Parameters or Exceptional Tennessee Waters

We have issue with the last sentence of the first paragraph. This sentence gives TDEC the authority to require a corrective action plan by the permittee if discharges from the MS4 are determined to cause or contribute to an in-stream exceedance of water quality standards. We believe this is the purpose of TMDLs with WLA and an implementation plan. As such, it is inappropriate to place this language in this permit. Recommend the last sentence be deleted

Section 3.1.1 Discharges into Waterbodies with EPA-Approved or Established TMDLs

Comment 1 – Recognize the phased process in paragraph 1.

Language in paragraph 1 states that the permittee must implement BMPs targeted to “achieve the reductions prescribed by the TMDL”. While a municipality may work towards achieving water quality standards, it cannot be guaranteed that every BMP implemented will work as intended nor achieve the water quality standards immediately.

Comment 2 – first paragraph, last sentence, delete in its entirety.

See comments concerning section 4.6.

With the recommendations contained in comments 1 through 2, we recommend the first paragraph be changed to read:

City of Bartlett
2022 Draft Phase II MS4 Permit Comments

The permittee must implement stormwater pollutant reductions *for applicable WLA(s)* consistent with the assumptions and requirements of any applicable WLA(s) in *the implementation plan contained in* TMDLs established or approved by EPA. If a TMDL is applicable, the SWMP must include Best Management Practices (BMPs) specifically targeted to *achieve make progress towards achieving* the reductions prescribed by the TMDL. The SWMP must also contain a monitoring and/or evaluation component to assess the effectiveness of the BMPs in achieving the reductions, and overall compliance with the standard of the Maximum Extent Practicable (MEP). Monitoring can entail a number of activities, including but not limited to: outfall monitoring, instream monitoring or modeling. Monitoring requirements are further described in subpart 4.6 of this permit.

Comment 4 – Recognize a phased process paragraph 2

Language in paragraph 2 states that the permittee must revise the SWMP to include BMPs specifically targeted to “achieve the reductions prescribed by the TMDL”. While a municipality may work towards achieving water quality standards, it cannot be guaranteed that every BMP implemented will work as intended nor achieve the water quality standards immediately. Recommend the paragraph be changed to read:

Not later than 180 days following a newly approved or established TMDL, the SWMP must be revised to include BMPs specifically targeted to *achieve make progress towards achieving* the reductions prescribed by the TMDL.

Section 3.1.2 Discharges to Waterbodies with Unavailable Parameters without TMDLs

Comment 1 – line 3, typo – need a space between “3.1” and “as”.

Comment 2 – first sentence

Permittees cannot guarantee that the chosen BMPs will fully address the discharge of pollutants or that the BMP will immediately result in non-degradation of the waterbody. The language should allow for a phased process of working towards compliance

Comment 3 – Delete the last sentence. See comments for section 4.6.

With the recommendations contained in comments 1, 2 and 3, we recommend the paragraph be changed to read:

City of Bartlett

2022 Draft Phase II MS4 Permit Comments

For the discharge of nutrients, pathogens, siltation or other parameters related to stormwater runoff from urbanized areas into a receiving water which has been identified according to subpart 3.1 as having unavailable parameters but not covered by a TMDL, the permittee must document in its SWMP ~~how~~ the BMPs *they* will *use to* address the discharge of these pollutants. Compliance with this section shall be demonstrated through a monitoring component to assess the effectiveness of the BMPs in *making progress towards* controlling the discharge of these pollutants. This component must also be included in the SWMP. Monitoring can entail a number of activities including but not limited to: outfall monitoring, in-stream monitoring and/or modeling. ~~Monitoring requirements are further described in subpart 4.6 of this permit.~~

Section 3.2.1.1 Requirements in order to be permitted as co-permittees

Comment 1 – First paragraph

Subparagraphs b and c appear to be mixed together. Recommend changing it to read more coherently.

Comment 2 – Paragraph 2, line 1

The sentence begins with the word Either. Doesn't appear to belong.

Section 3.2.2 Coordinated Programs

Subparagraph b, line 6 – typo. Should be a space between “5” and “of”.

Section 4.1 Requirements

Comment 1 – Paragraph 1, line 8.

Reference is made to subpart 4.4 for periodic review. Subpart 4.4 does not require periodic review. Recommend this statement be deleted or the reference removed.

Comment 2 – Last sentence of paragraph 1.

We take issue with changes of the SWMP having to be approved through TDEC. TDEC does not require a copy of the SWMP be submitted to them for approval so why would changes that a permittee believes are required to improve their Program have to be

City of Bartlett

2022 Draft Phase II MS4 Permit Comments

approved? This also restricts the inherent flexibility that the permit process should be affording the permittees for program implementation. Additionally, the references used in the rationale accompanying the draft permit (subpart 5.6, SWMP Modification) do not require this. 40 CFR 122.63 deals with modifications to *permits*, not SWMPs and 40 CFR 122.34(d) requires changes to the SWMP be reported in the annual report but does not require them to be approved by TDEC. Recommend the last sentence of the first paragraph be changed to read:

Changes to the SWMP must be approved and documented reported with the annual report according to sub-part 4.4

Comment 3 – A new paragraph has been added to this section concerning mechanisms for documenting compliance with the permit. A review of the rationale provides no guidance concerning this requirement. Please provide guidance or remove from the permit.

Section 4.1.1 – Newly Permitted MS4s

Table row 3, column 3. Implementation due date is listed as 12 months but subpart 4.6.1.1.2 (which is referenced) specifies 24 months. Recommend this row be deleted since the first paragraph of this section requires it to be completed within 24 months.

Section 4.1.2 – Previously Permitted MS4s

Comment 1 – Table row 1, column 3

This should be 24 months from the effective date of the notice of coverage. The permittee has 90 days to submit an NOI and TDEC requires time to process the NOI. The permit does not apply to an MS4 until they have coverage (an NOC). Requiring a permittee to comply with a permit before they have coverage under that permit is inappropriate.

Comment 2 – Table row 2, column 3.

This should be 24 months. As we said in comments for the previous permit when TDEC elected to arbitrarily reduce this number from 24 months to 18 months, the permittee must go through a series of interpreting, writing, legal review, stakeholder meetings, public comment and Mayor/Board of Alderman approval (for us, three readings) before implementing ordinances. TDEC should be well aware of these challenges as it moved through the processes of rulemaking. The permit provides for 24 months to change

City of Bartlett

2022 Draft Phase II MS4 Permit Comments

ordinances for permit modifications. TDEC should do the right thing and be consistent for changes in ordinances to be implemented 24 months from the effective date of the CGP.

Comment 3 – Table row 3, column 3.

This should be 24 months from the effective date of notice of coverage. See comment 1.

Comment 4 – Table row 4.

Implementation plans should be contained in the permittee's SWMP. Since the permittee is not required to submit the SWMP to TDEC, it is inappropriate to require a portion of the SWMP be submitted in permit language. It can be submitted upon request.

If this item remains in the permit, *please provide rationale*. Is it TDECs intention to provide feedback to the permittee as to whether the schedule is acceptable or meets permit requirements? As a reminder and as quoted from 55 Fed. Reg. 48052:

EPA disagrees with the notion that this regulation, which addresses permit application requirements, should create mandatory permit requirements *which may have no legitimate application to a particular municipality*. The whole point of the permit scheme for these discharges is to avoid inflexibility in the types and levels of control. Further, to the degree that such mandatory requirements may be appropriate, these requirements should be established under the authority of section 402(p)(6) of the CWA and not in this rulemaking which addresses permit application requirements.

With this said, we find it difficult to find a legitimate application to a small MS4 program for a mandatory permit requirement requiring the submittal of an implementation schedule. This row should be deleted.

Comment 5 – Table row 5, column 3.

This should be 24 months from the effective date of notice of coverage. See comment 1.

City of Bartlett
2022 Draft Phase II MS4 Permit Comments

Section 4.2.1 – Public Education and Outreach on Storm Water Impacts

Comment 1 – General comment

This part of the permit is one of the minimum requirements but the way it is to be enforced is up to the local MS4 as recommended by EPA and not required as per your own rational statement; therefore the way the local MS4 addresses the requirement should be left up to the MS4 and not delegated as must having specific number of training events. It may be more effective to have U-Tube videos or other digital platforms prepared that address targeted issues in the community as opposed to general meetings with HOA's or other activities that may not provide effective and only eat up local community resources.

Comment 2 – General comment

The requirements in this draft permit are much more specific than those in the current draft. The current permit allows the permittee to tailor their programs to their communities. This is consistent with EPA guidance contained 40 CFR 122.34(b)(1)(ii). However, the changes propagated in this draft removes that flexibility and requires the permittee to implement specific activities that may not be appropriate for their community. Additionally, this draft permit sets an arbitrary minimum number of events the permittee must conduct during the reporting year, based upon the population of the MS4. Has TDEC any data to support that conducting a minimum number of activities each reporting year equates to an increase in the quality of waters? We request this permit section remain as written in the current permit.

Comment 3 - subparagraph c.

The objective of this program as stated in the first paragraph is to reduce or eliminate behaviors and practices. This subpart requires the permittee to include a methodology to evaluate components to assess overall effectiveness. How does TDEC intend for the permittee to assess changes in behavior and practices? Please provide guidance. This requirement is well beyond any measurable outcomes associated with water quality improvement. I would suggest that, if EPA wants this, they, with their resources, develop, with input of stakeholders, the metrics to measure this and provide that to the permittees as this request is far beyond what should be asked of an MS4.

Section 4.2.1.1 Public

See comments provide in section 4.2.1.

City of Bartlett

2022 Draft Phase II MS4 Permit Comments

If not changed back to the existing requirement then the number should be reduced for all categories.

Section 4.2.1.2 Engineering and Development Community

Comment 1 – see comments for section 4.2.1

Comment 2 - This permit requirement is inappropriate for permit language. Most people in the Engineering and Development communities are well aware of storm water ordinances and regulations because they have to get permits from TDEC as well as EPSC certifications. Plans have to be processed through the permittee's planning and construction process. This type of training serves no use to the permittee or the engineering and development communities and represents a waste of valuable time and resources of the permittee as well as the engineers and developers. Recommend this requirement be deleted from the permit as TDEC is addressing this in their requirements for Level 1 and 2 certification of professionals in the construction industry and the permittees are already addressing ordinance requirements as part of the plan processing process.

Section 4.2.1.3 Employees

Comment 1 – see comments for section 4.2.1

Comment 2 – Notwithstanding comment 1, annual employee training is inappropriate for permit language. EPSC *certification* is required every three years. To require knowledge (awareness) based training annually as compared to performance based training every three years is inappropriate. It should be sufficient to require training at least once per permit cycle. Recommend the measurable goal be at least once per permit cycle with the measurable goal being total number of employees identified as requiring training, total number of employees trained. Delete the provide details of each activity (inappropriate for annual reporting, okay for an audit).

Section 4.2.2 Public Involvement/Participation

Comment 1 – Table row 2

Small MS4s are not required to submit major modifications for formal public notice process. The program modifications specified in subpart 4.4.1 apply to large and medium MS4s. Subpart 5.6 of the rationale, included with the draft permit, refers to 40 CFR 122.63

City of Bartlett

2022 Draft Phase II MS4 Permit Comments

which applies to modifications of *permits*, not the SWMP. This row should be deleted from the permit.

Comment 2 – Table row 3, column 2

Subpart numbers run together. We believe the intent was 4.2.4

Comment 3 – Table row 4 (continued from row 3), column 1

Subpart numbers run together. We believe the intent was 4.2.4

Comment 4 – Table row 4 (continued from row 3), column 2

Subpart numbers run together. We believe the intent was 4.2.4

Comment 5 – Table row 4 (continued from row 3), column 3

We believe the intent was to delete “-% of comments received from public on construction site project” from the table when “# of comments...” was added.

Section 4.2.2.1. General Public

The number of activities needs to be reduced as discussed in previous general comments.

Section 4.2.2.2 Commercial and Development

Comment 1 - The first sentence in this is incorrect. This does not address engineers and development community. It is for other commercial agencies.

Comment 2 - The number of training activities should be reduced for all categories in the table as discussed in the general discussion.

Section 4.2.3 Illicit Discharge Detection and Elimination

Comment 1 – subpart a, line 2

Change “0” to “4.2.3.1”

City of Bartlett

2022 Draft Phase II MS4 Permit Comments

Comment 2 – Table row 1

Delete the requirement to submit the storm water map with the annual report. If you want to make sure the permittee has one, perform an audit. This serves absolutely no purpose for annual reporting.

Comment 3 – Table row 6

Delete requirement for interagency activities. The permittee cannot guarantee that another agency can/will participate in an interagency activity each reporting year. Having a permit requirement that requires participation by an outside agency is inappropriate. Our incident commander is the Fire Chief and we will work with him on addressing any spill in our areas however we will not be the lead on this cleanup or provide training to him as he is more qualified than any of us on spill containment and all coordination will be with the incident commander as required by the Federal National Incident Management System ICS100 and ICS 300 training. This requirement needs to be removed from the permit or modified to reflect that the MS4 will work with the appropriate agency to address a spill as required in NIMS training.

Section 4.2.4 Construction Site Stormwater Runoff Control

Comment 1 – Subpart a, line 8.

Change 12 months to 24 months. See comments for section 4.1.2.

Comment 2 – subparagraph f, last sentence.

Recommend this sentence be deleted. How does a time frame for review of construction site plans have any impact on water quality? What does TDEC think that time frame should be? What is driving this requirement? Plan review and approval is a process that can take a week or years depending upon the complexity of the plans. Placing an arbitrary permit requirement like this in small MS4 permit language is inappropriate. Developers and builders are our customers. We are not going to rush a plan through to meet an artificial time frame nor or we going to sit on it for an unusual amount of time. If a

City of Bartlett

2022 Draft Phase II MS4 Permit Comments

developer/engineer/homebuilder is having an issue with the review process in their community, let them handle it through their local governments, not through permit language.

Comment 3 – subparagraph h, last sentence.

We have issue with a permit requirement to perform inspections on 10% of all non-priority sites. There is a reason they are considered non-priority. Their impact on receiving streams are minimal. The permittee already has the ability, through ordinance, to treat discharges from those sites as illicit and may respond to them accordingly. This requirement is adding more work with not benefit to water quality. Recommend the last sentence be deleted.

Comment 4 – Table row 1, columns 2 and 3.

Each permit cycle, TDEC continues to shorten the time to make regulatory changes resulting from a changing CGP. What was originally 24 months, has shrunk to 18 months in the current permit and is now proposed for 12 months in this draft permit (although section 4.1.2 of this draft still shows 18 months). We continue to be at a loss to understand what is driving decreasing times for permittee implementation of new CGP requirements through ordinance. As we argued in the last draft permit (which still decreased the time to 18 months), in order to implement ordinances, most small MS4s must go through a process of interpreting, writing, stakeholder meetings, legal review, public comment periods and elected/appointed board approvals. TDEC should be well aware of the challenges resulting from rule making they recently went through. Even the time line for ordinance updates for *this* permit is set at 24 months. Do the right thing and be consistent with ordinance updates complete and implemented as soon as possible but not later than 24 months following the effective date of the CGP.

Comment 5 – Table row 2, column 3.

The current annual report form requires the permittee to report how many active permits were inspected during the reporting period. Documenting how many you started with and how many you finished with (as this draft permit reporting requirement specifies) doesn't provide an accurate assessment of how many active permits the permittee dealt with during the reporting period. So, what exactly is this reporting supposed to be for? Certainly doesn't mean anything to this permittee. We could start with 25 permits, have 10 added during the reporting period, have 10 terminated during the reporting period and end with 25. Meaningless. Let us not just collect data for no reason. Recommend the row be deleted.

City of Bartlett
2022 Draft Phase II MS4 Permit Comments

Comment 6 – Table row 5.

Delete in its entirety. See comment 3.

Comment 7 – Table row 6, column 3

Since the measurable goal is 100% inspections, shouldn't the reporting be percent of Priority Construction Activities inspected at least once per calendar month as opposed to percent inspected less than once a month?

Section 4.2.5.1 Permanent Stormwater Management Program

General comment - A statement needs to be made in the permit that acknowledges the settlement agreement between TDEC and the Shelby County small MS4s. All small MS4s in Shelby County are exempt from permanent stormwater management requirements as a result of that settlement. This is necessary to ensure that the small MS4s in Shelby County are not sued for noncompliance with their permit by a third party.

Comment 1 – subpart d.

Implementation plans should be contained in the permittee's SWMP. Since the permittee is not required to submit the SWMP to TDEC, it is inappropriate to require a portion of the SWMP be submitted in permit language. It can be submitted upon request.

If this item remains in the permit, *please provide rationale*. Is it TDECs intention to provide feedback to the permittee as to whether the schedule is acceptable or meets permit requirements? As a reminder and as quoted from 55 Fed. Reg. 48052:

EPA disagrees with the notion that this regulation, which addresses permit application requirements, should create mandatory permit requirements *which may have no legitimate application to a particular municipality*. The whole point of the permit scheme for these discharges is to avoid inflexibility in the types and levels of control. Further, to the degree that such mandatory requirements may be appropriate, these requirements should be established under

City of Bartlett

2022 Draft Phase II MS4 Permit Comments

the authority of section 402(p)(6) of the CWA and not in this rulemaking which addresses permit application requirements.

With this said, we find it difficult to find a legitimate application to a small MS4 program for a mandatory permit requirement requiring the submittal of an implementation plan. This requirement should be deleted.

Comment 2 – subpart d, first sentence

Notwithstanding comment 1, 90 days from the effective date of the permit is requiring permit compliance when the permittee has not obtained coverage yet. An existing permittee has 90 days to submit an NOI. This is supported by the table in subpart 4.1.2 that specifies 90 days from the effective date of the NOC. Recommend the sentence be changed to read “90 days after the effective date of the NOC issued for the first new or revised....”

Comment 3 – subpart d, line 17.

Notwithstanding comment 1, the 24 months should be from the effective date of the notice of coverage. Timing for any permit requirement should be based upon the effective date of the NOC, not the effective date of a permit. Recommend the line be changed to read “the NOC issued for the first permit....”

4.2.5.2 Permanent Stormwater Standards

Comment 1 – subparts a & b.

Please provide guidance on how to incorporate these requirements into lots less than one acre but part of a larger common plan of development. Are these only to be covered by TDEC small lot permits?

Comment 2 – subpart b, second, third and fourth sentences.

As this is written, the burden of SCM design is placed upon the permittee. We believe this is not TDEC’s intent. The project designer is responsible for determining what SCM they should use to achieve the water quality standard for the development or re-development. With the vast amount of information currently available to designers, the permittee should not have to be required to provide a suite of SCMs for use. Additionally, section 5.5.3.6

City of Bartlett

2022 Draft Phase II MS4 Permit Comments

of the Construction General Permit requires the project SWPPP to include a description of any measures that will be installed during the construction process to control pollutants in stormwater discharges that will occur after construction operations have been completed. Since the SWPPP is designed by someone who has completed EPSC Level II certification or a PE, the designer should be already aware of the SCMs available, or where to find data for them, and not require a suite be provided to them by the permittee. Recommend sentences 2, 3 and 4 be deleted.

Comment 3 – subpart c, line 9.

Has TDEC determined the impact of removing roof runoff from WQTVs to those communities collecting a storm water fee based upon impervious surfaces?

Section 4.2.5.4 Water Quality Riparian Buffers

Subparagraph d. The permittee is not responsible for project design. If the project engineer needs to use alternate buffer widths, they need to provide the criteria they used to develop the alternate buffer width as part of the planning and approval process the permittee uses. Procedures and criteria cannot be developed by the permittee in *advance* of knowing the type of project, existing land use and physical restrictions. We cannot see into the future. Therefore, the permittee cannot submit such procedures and criteria to TDEC for approval. Taking it one step further, the project engineer should have this data in the SWPPP that is submitted to TDEC for coverage under the CGP. Issuance of the CGP coverage would be TDEC approval. Recommend the second sentence be changed to read “....the project engineer must develop.....” and the last sentence be deleted.

4.2.5.6 Development Project Plan Review, Approval, and Enforcement

Comment 1 – delete in its entirety.

This section is redundant and causes confusion during TDEC audits. As written, it requires a separate plan and review process for permanent stormwater management. Construction plans for new and re-development would include permanent stormwater management SCMs. As such, section 4.2.4(f) already requires plan review and approval. Section 4.2.4(h) already requires enforcement actions. Additionally, section 5.5.3.6 of the Construction General Permit requires the project SWPPP to include a description of any measures that will be installed during the construction process to control pollutants in stormwater discharges that will occur after construction operations have been completed.

City of Bartlett

2022 Draft Phase II MS4 Permit Comments

Again, the review required by this paragraph would be accomplished as part of the project review and approval process outlined in section 4.2.4.

Comment 2 – section title.

Notwithstanding comment 1, the section title includes enforcement. The requirement for enforcement has already been established in the first paragraph of section 4.2.5.1. We recommend the section title be changed to read:

Development Project Plan Review *and* Approval ~~and Enforcement~~.

Comment 3 – first paragraph.

Notwithstanding comment 1, this paragraph has references to enforcement. The requirement for enforcement has already been established in the first paragraph of section 4.2.5.1.

Comment 4 – first paragraph.

Notwithstanding comment 1, the language does not limit the process to sites subject to the CGP.

Notwithstanding comment 1 and based on comments 3 and 4, we recommend the paragraph be changed to read:

The permittee shall develop and implement project plan review, *and* approval ~~and enforcement~~ procedures applicable, at a minimum, to all new development and redevelopment ***subject to the CGP***, which shall include:

Comment 5 – subparagraph c.

Notwithstanding comment 1, the “within 90 days of installation” requirement appears to be rather arbitrary. Especially since the verification includes as-built data. As-built data usually isn’t provided until after construction projects are complete. Additionally, SCMs installed and verified early in the construction process could easily be damaged during construction occurring after SCM has been constructed and verified. When does the 90 days’ start? When the owner does install or when the building on lots are complete? These are two different time frames and need to be specified in the permit.

City of Bartlett

2022 Draft Phase II MS4 Permit Comments

Comment 6 – subparagraph c.

Notwithstanding comment 1, although the permittee has regulated authority in regards to the MS4, the permittee has no authority over private permanent stormwater control measures that are not installed in the municipal system. Section 40 CFR 122.26 defines an MS4 as “owned or operated by a State, city, town, borough, county, parish, district, association, or other public body”. As such, enforcement action is limited to illicit discharges to the MS4 as identified in the permittee’s ordinance or other regulatory device. Just because the rules say you can trespass on private property doesn’t mean you can. Recent court action against TWRA should be evidence to this. Additionally, section 7-14 of this draft permit specifically says “The issuance of this permit does not authorize trespassing....”

Section 4.2.5.7 Maintenance of Permanent Stormwater Control Measure Assets

Subpart b(4). This paragraph requires an agreement to allow the permittee to access SCMs for the purpose of inspecting them and providing enforcement. Although the permittee has regulated authority in regards to the MS4, the permittee has no authority over private permanent stormwater control measures that are not installed in the municipal system. Section 40 CFR 122.26 defines an MS4 as “owned or operated by a State, city, town, borough, county, parish, district, association, or other public body”. As such, enforcement action is limited to illicit discharges to the MS4 as identified in the permittee’s ordinance or other regulatory device. Requiring the permittee to have an access agreement for inspections of SCMs exceeds the regulatory authority of the permittee. To this, the permittee may only address inadequate inspection and maintenance as a result of an illicit discharge to the MS4 as identified in the permittee’s ordinance or other regulatory device. With that said, if the developer refuses to grant such permission and the permittee does not process the planning application, the State has made the permittee a target for litigation, removing the burden of defense from the State and placing it upon the permittee.

Section 4.2.5.8 Inventory and Tracking of Permanent Control Measure Assets

Although the permittee has regulated authority in regards to the MS4, the permittee has no authority over private permanent stormwater control measures that are not installed in the municipal system. Section 40 CFR 122.26 defines an MS4 as “owned or operated by a State, city, town, borough, county, parish, district, association, or other public body”. As such, enforcement action is limited to illicit discharges to the MS4 as identified in the permittee’s ordinance or other regulatory device. Requiring the permittee to maintain any documentation in regards to inspection and maintenance of private SCMs exceeds the

City of Bartlett

2022 Draft Phase II MS4 Permit Comments

regulatory authority of the permittee. Just propagating these requirements in rulemaking does not make them legal. The State is making the permittee a target for litigation, removing the burden of defense from the State and placing it upon the permittee. We cannot trespass on private property just because TDEC wants us to do so and we will not send individuals employed by the City onto property without permission or a search warrant.

Section 4.2.5.9 Management Measures. Goals and Annual Report Requirements

Comment 1 – table row 2, column 3.

Typo – “met” should be “meet”

Comment 2 – table row 4, column 2.

Requiring a time frame for plan review is inappropriate. See comments for section 4.2.4(f).

Comment 3 – table row 5, column 2.

Should be “project completion” as opposed to “of installation”. See comments for section 4.2.5.6(c).

Comment 4- table row 6.

Rule making does not grant legal authority to an permittee to violate an individual or company’s property right. Requiring the permittee to establish legal authority to do so puts the permittee as the target for legal action. Additionally, requiring an individual or company to surrender their property rights before they will be issued a permit is inappropriate. The permittee has legal authority over the municipal separate storm sewer system, not private storm sewer systems. This legal authority is granted in the Clean Water Act. Section 40 CFR 122.26 defines an MS4 as “owned or operated by a State, city, town, borough, county, parish, district, association, or other public body”. Nowhere does it say the permittee has legal authority over a private separate storm sewer system. To this, the permittee should only be required to address maintenance issues if it detects an illicit discharge into the municipal system. The draft permit goes on to expound on the fact that this permit does not grant the permittee authority to trespass (section 7.14). But, TDEC expects the permittee to provide, through ordinance, the legal right to trespass. How well did that work for TWRA? The city cannot do this.

City of Bartlett

2022 Draft Phase II MS4 Permit Comments

Section 4.2.6 Pollution Prevention/Good Housekeeping

A requirement for *annual* training has been added to this permit but no rationale has been given for this addition. Annual employee training is inappropriate for permit language. EPSC *certification* is required every three years. To require knowledge based training annually as compared to performance based training every three years is inappropriate. It should be sufficient to require training at least once per permit cycle. Has TDEC demonstrated, through audit or inspection, that the current permit requirement for training is insufficient? Recommend this requirement be deleted.

Section 4.3 Qualifying Tribe, State or Local Program

First paragraph, line 1. Typo.

Section 4.3.2 QLP Minimum Program Requirements

Subpart d – could not locate CN-1440 on the website.

Section 4.4. Storm Water Management Program Modification

General comment – this section is more restrictive and requires more actions of the MS4 than the requirements of 40 CFR 122.34(d) which only requires that changes to the SWMP be reported on the annual report, not submitted to TDEC for approval. Additionally, the rationale provided with the draft permit cites 40 CFR 122.63. The cited reference concerns modifications of *permits*, not SWMPs. Recommend section 4.4.1 be changed to read:

“Permittees may modify the SWMP anytime during the life of the permit. A description of the modification shall be included in the subsequent Annual Report.” With that, subsections 4.4.1.1 and 4.4.1.2 should be deleted. Table row one, column one would be changed to read “Identify modifications and report as required.” Table row one, column two would be changed to read “Report all modifications to SWMP as required”. Table row one column three would be changed to read “Include a description of the modification(s) made”.

Section 4.6.1.1 Monitoring

Comment 1 – first paragraph

City of Bartlett

2022 Draft Phase II MS4 Permit Comments

The stated purpose of the monitoring program is to provide data and information to identify pollutant sources and aids in determining the effectiveness of the SWMP. However, the data required to be captured far exceeds the data a permittee needs to make this determination. A permittee may wish to help TDEC perform sampling that may result in the removal of a stream segment from the 303(d) list but making those requirements part of permit language is simply placing the work, and the associated financial burden, TDEC should be performing on the permittee.

Comment 2 – subpart a

Streams were assessed with unavailable parameters before the permit is issued. Compliance with the permit would be what, non-compliant, if the streams continue to be assessed with unavailable parameters? What is the measurement TDEC is expecting that would show the permittee is in compliance with the permit?

Comment 3 – subpart b

See comment 2.

Comment 4 – subpart c

See comment 1.

Section 4.6.1.1.1 Option 1

Requires the use of TDEC internal procedures for stream assessment of stream habitat. Not only is it inappropriate to require a permittee to use procedures they have never had the opportunity to provide comment upon, this type of testing requires the permittee to outsource the testing, requires a biologist to interpret and has no value to the permittee. This is why the permittees pushed for something else. If TDEC needs to keep it in the permit to prevent “backsliding”, so be it but do not expand it to the point that you have in this permit. Don’t make the permittees do the work of TDEC through permit language.

Section 4.6.1.1.2 Option 2

Why do we have to submit to Nashville and not the Field office that has the best knowledge of the conditions in this area? That does not make sense.

City of Bartlett

2022 Draft Phase II MS4 Permit Comments

General comment – The rationale basically implies that the current, broadly designed, option 2, prevented some permittees from taking the opportunity it provided. So, taking away flexibility removes that prevention? TDEC approved the plans permittees developed for use in option 2. Don't make things less flexible, just make sure the monitoring plans submitted fit the permit.

Comment 1 – first paragraph, subpart a

What is the metrics TDEC intends the permittee use to measure the effectiveness of the SWMP? See comment 2 for section 4.6.1.1 above.

Comment 2 – first paragraph, subpart e

We argued before that TDEC is requiring the use of an internal TDEC procedure that the permittee has not had an opportunity to provide comment on. I guess the TDEC answer is to strong-arm the permittee by making them agree to use those procedures before TDEC approves the use of option 2.

Comment 3, second paragraph, subpart g

See comment 2 above.

Comment 4 – third paragraph, line 2

Change “of this permit” to “the NOC”. This permit should not require any timeframe that begins earlier than the date of the NOC for the permit. Must have coverage before you can comply with the permit.

Section 4.6.1.2.1 Representative Sampling

General comment – TDEC needs to understand that small MS4s function to serve the communities they represent. They do not normally have a staff made up of environmental specialists. Please define in simpler terms what this paragraph means.

Section 4.6.1.3 Semi-Quantitative Single Habitat Reporting

See comments for Section 4.6.1.1 and 4.6.1.1.2

City of Bartlett

2022 Draft Phase II MS4 Permit Comments

Section 4.6.2 Storm Water Management Program Evaluation

General comment – Please provide a copy of this report for comment. It would seem that the annual report would be the program evaluation. Otherwise, why do an annual report? See comment for section 5 below. If an evaluation must be done I would think one midway through the permit cycle and one at the end of the permit cycle would be more appropriate as opposed to annually.

Section 4.7 Legal Authority

General comment – Our interpretation of legal authority is those portions of the permit that require some type of ordinance implementation. That would seem to make this section appear rather redundant. The permittee will enforce its ordinance and if TDEC deems the ordinance non-enforceable then TDEC needs to submit to the permittee the changes required. With that said, the rationale used (section 5.7, Legal authority) have little to do with a small MS4. Nothing in the referenced 40 CFR 122.34(b)(3)-(4) requires legal authority certification. 40 CFR 122.26(d)(2)(i) applies to large or medium MS4s and, again, does not require legal certification and is being cited as the basis for BMPs. This section of the permit needs to be removed.

Section 4.7.1 Annual Report Requirements for Legal Authority

An attorney's certification of the small MS4s SWMP is inappropriate. There is nothing in any of the references used in the rationale to support such a permit requirement. Many of the items specified in this draft permit are legally questionable (property right violations at the least). To have an attorney go through every requirement of the permittee's SWMP is onerous. Has TDEC obtained the State Attorney General's certification that the requirements put forth by this permit are legal? How has the TWRA loss in court because of property rights violations been rectified? This is an overreach of the requirement and I do not think you will find an attorney in the State that will certify this as written.

Section 5 Annual Report

No sample of the electronic reporting form was provided for comment.

Section 7.14 Property Rights

City of Bartlett

2022 Draft Phase II MS4 Permit Comments

It is interesting to note that the issuance of this permit does not authorize trespassing but TDEC wants to use rule making and withholding of permits for permission to require the permittee to trespass and require the city attorney to certify it is legal to do so. This is just wrong.

Section 7.18 and 7.19

The first line of 7.18 says the permittee will operate and maintain all facilities. We do not operate or maintain private facilities. This needs to be clarified as the permittee has no right or obligation to maintain or operate installation on private property and can only address those facilities when the facility fails, resulting in an illicit discharge into the MS4 system. This is a similar issue on 7.19. The MS4 will allow entry and inspection on public owned property but cannot require such on private property without a warrant or permission of the owner.

From: Mekayle Houghton <mekayle.houghton@cumberlandrivercompact.org>
Sent: Friday, May 20, 2022 1:00 PM
To: Ariel Wessel-Fuss
Subject: [EXTERNAL] comments on Proposed Draft Small MS4 General Permit

*** This is an EXTERNAL email. Please exercise caution. DO NOT open attachments or click links from unknown senders or unexpected email - STS-Security. ***

RE: TDEC's Draft General NPDES Permit for Discharges from Small Municipal Separate Storm Sewer Systems (sMS4s).

The Cumberland River Compact rarely comments on proposed rule changes. However, in this instance, the organization is obligated to join Tennessee citizens and MS4s to voice opposition to two proposed changes that will have a dramatic impact on water quality in Tennessee:

Section 4.2.5.2.c., on page 33, notes "Uncontaminated roof runoff may be excluded from the WQTV." This sentence should be removed from the permit. If included, the permit would allow designers of post-construction stormwater control measures to pretend that some portion, even the major portion, of impervious surface area simply doesn't produce runoff when it rains. In urban settings, no runoff from impervious surfaces, including roofs, is uncontaminated, much less permanently uncontaminated. Contaminants – solid and dissolved - come from a range of deposition sources like dust, pollen, fallout from combustion, from wildlife... as well as from weathering and decomposition of the roof itself. I join others in requesting that if maintained, TDEC should provide in the rationale clear scientific evidence that roofs do not contribute detrimentally to runoff and do not deliver pollutants to streams/rivers.

Section 4.2.5.4.b and c, on pages 36 and 37, explicitly allows infiltration-based stormwater control measures in the riparian buffer. It is well-accepted that the best control for post-construction runoff is for it to infiltrate into suitable soil or media. Creekside stream buffer areas may be the worst location for infiltration-based stormwater control measures. First, the water table adjacent to a stream will prevent any meaningful infiltration. Second, one of the keys to effective infiltration is to keep the infiltration area from getting blanketed with silt. High stormwater flows in buffer areas will surely deliver silt to these practices which will quickly render them ineffective. The permit should not speak to the allowance of these practices in riparian buffers and the local governments should have complete discretion regarding where infiltration-based stormwater practices may be placed. I speak on behalf of the Cumberland River Compact and as a member of TN H2O's steering committee and natural resources sub-committee responsible for this: "MS4 discharges are by far the leading pollution source in Tennessee that is subject to regulation." Tennesseans expect the government's laws to give them access to clean water. This change in the NPDES permit will result in dirtier water and is an abnegation of the duty to ensure Tennesseans have clean water. Thank you for accepting these comments and for TDEC's excellent work in service to Tennessee's natural resources. Respectfully,

Mekayle Houghton
Executive Director
m:

615.210.9600

a:
35 Peabody Street, #305
Nashville, TN 37210

From: Nicholas Snider <nsnider1806@gmail.com>
Sent: Friday, May 20, 2022 2:29 PM
To: Ariel Wessel-Fuss
Subject: [EXTERNAL] Small MS4 Draft Permit Public Comments

Good afternoon Mrs. Wessel-Fuss,

I hope this email finds you well. I am writing in response to the recently published Small MS 4 draft permit. As a professional involved in the Storm Water Management Industry some of the new proposed rules are very concerning for my colleagues and I. As they are vague in how they are written and do not actually provide any clarity regarding what the State is going to require going forward.

For instance, 4.2.5.2c states uncontaminated roof run off may be excluded from the WQTV. What measurement mechanisms are in place to determine whether the roof run off is contaminated? Who is responsible for monitoring the level of contamination? What is considered contaminated? Why is contaminated or uncontaminated not defined in the permit?

Also, section 4.2.5.2 Permanent Stormwater Standards section one on page 35 states, "TSS removal rates for other SCMs must be from published reference literature". What published literature? Will the required literature be peer reviewed? Will it be from a reputable source or will the state accept published reference literature from youtube or wikipedia? Since that is technically considered published reference literature?

Furthermore, why are MTDs required to be evaluated using industry wide standards and other SCMs must only be from published reference literature. This is a huge disparity in the requirements for an MTD to be utilized versus a different SCM. As you well know there is numerous published reference literature that states all manner of things that are not and have never been true. Stating that the SCM must be from published reference literature allows for any manner of "referenced literature" to be utilized when selecting a SCM to use versus an MTD.

In order for the permit to be consistent statewide would it not be more prudent for SCMs to be required to undergo third party testing as MTDs currently are required by permit to do.

Thank you for your time and consideration.

--

Nicholas Snider, Esq.



ENGINEERING & PUBLIC WORKS

Development Services • Fleet Management • Environment and Planning • Operations

Tennessee Department of Environment and Conservation, Division of Water Resources
Attention: Ariel Wessel-Fuss
312 Rosa L. Parks Avenue, 11th Floor
Nashville, Tennessee 37243

Dear Ms. Wessel-Fuss,

This letter provides comments to the draft State of Tennessee NPDES small Municipal Separate Storm Sewer System (MS4) Permit (draft permit) published on March 22, 2022. These comments are submitted on behalf of the Knox County Engineering and Public Works Department.

These comments are an update of those submitted on April 26th, 2022, based on oral responses from TDEC and additional internal review. Any questions you have about these comments can be directed to me.

Kind Regards,

A handwritten signature in blue ink, appearing to read "Quinn Cypher", with a long horizontal flourish extending to the right.

Quinn Cypher

Stormwater Compliance Manager
Engineering and Public Works
Cell: 865-755-6449
205 West Baxter Avenue
Knoxville, TN 37917





ENGINEERING & PUBLIC WORKS

Development Services • Fleet Management • Environment and Planning • Operations

Comments and questions for TDEC on the Draft Small MS4 General Permit

Construction Site Stormwater Runoff Control Questions

1. In Section 4.2.4., page 29, item g.: Please clarify the meaning of *“receiving and considering comments”*. How does TDEC intend the MS4 to show that they are *“considering comments”*?

Post Construction/Permanent Storm Water Management in New Development and Redevelopment Questions

1. Please add a definition for “Stormwater Control Measures (SCMs)”, specifically covering how the term pertains to section 4.2.5 of the draft permit.
2. Are the requirements for SCMs established in this permit applicable to SCMs installed from the start date of this permit forward or are they to be retroactively applied to previously installed SCMs?
3. Section 4.2.5.2, page 33, item b. Please clarify “information relevant” and “readily available” in the following statement: *“Information relevant to identified SCMs should be made readily available.”*
4. Section 4.2.5.2, page 33, item b.: Please define “Significantly limit” as it pertains to the following statement: *“If the permittee decides to significantly limit the number of SCM options it must be documented in the stormwater management program how the performance standards of Tennessee Rule 0400-40-10-.04 can be met with the limited set of control measures that are allowed.”*
5. Section 4.2.5.2, page 33, item c.: Please remove the exception to WQTV of *“Uncontaminated roof runoff”* or provide the specific circumstances, documented in the permit, where roof runoff is considered by the division to be *“Uncontaminated”*.
6. Section 4.2.5.4., page 36, Please add the following definitions in the permit: *“establish”, “protect”, and “maintain”*, specifically covering how those terms pertain to water quality riparian buffers.

Education and Outreach on Storm Water Impacts & Public Involvement/Participation Questions:

1. Please define *“activity”* as it pertains to the minimum number of activities the MS4 must conduct each reporting year (Page 15; Section 4.2.1.1 & other sections) Specifically, what level of action defines an activity?
 - a. For example, is educating a SCM owner/operator in the field considered one activity, or is the program to educate SCM owners/operators encountered during SCM inspections considered the activity?
 - b. Is a single person educated, such as at a field visit or on a phone call considered an acceptable activity?
2. On Page 20 (4.2.2) the Annual report requirement asks for *“% of comments received from the public on construction site projects”*. What is the denominator used to find this percentage? Please clarify this requirement or consider removing the reporting requirement.
3. Section 4.2.2.2, Page 22 needs some clarification. The section heading is *“Commercial and Development Community”* However the next statement is contradictory: *“The target audience for the engineering and development community includes, but is not limited to, restaurants, businesses, industries, professional chemical applicators, and other professional stakeholders.”* Restaurants,



ENGINEERING & PUBLIC WORKS

Development Services • Fleet Management • Environment and Planning • Operations

businesses, industries, and professional chemical applicators are not considered by Knox County to be part of the “Engineering and development” communities. **Please clarify this section and specify the target audience.**

Illicit Discharge Detection and Elimination Questions

1. Comment about Section 4.2.3, Page 24, # 7: All septic system failures in Knox County are given 30 days to respond to the health department’s notice, therefore all septic system failures that constitute a MS4 illicit discharge will be required to have a “*Corrective Action Plan*” by the draft permit. Is this TDEC’s intent? Knox County suggests that TDEC consider moving the requirement from 14 to forty-five (45) days for a corrective action plan for an illicit discharge that has not been eliminated.
2. Section 4.2.3, Page 24, # 7: Please explain what a “*Corrective Action Plan*” must contain to be acceptable to TDEC.
3. Section 4.2.3, Page 24, # 7: If an owner/operator does not provide a corrective action plan even when required by the MS4 what course of action does TDEC require the MS4 to take?
4. Section 4.2.3, Page 24, # 7: Please explain what is meant by the last sentence in this section “*The ERP shall include remedies to address failures by the owner/operator to complete the corrective action plan and eliminate the illicit discharge.*” Does TDEC intend the MS4 to enforce the corrective action plan and the MS4 to also eliminate the illicit discharge if the owner/operator fails to do so?
5. Section 4.2.3, Page 24, d.: Please define “*Significant*” as it pertains to this section.
6. 4.2.3 Page 25: Please elaborate on how to comply with the annual reporting requirements of “% of non-stormwater discharges or flow investigated as a significant contributor of pollutants to the MS4”. What denominator is used to find this percentage? Also please define “significant” as it pertains to this section.

Pollution Prevention/Good Housekeeping Questions

1. Section 4.2.6 Page 43, third paragraph: Please add a definition for “*in a timely manner.*”

Monitoring Questions:

1. Section 4.6.1.1.2 on page 56 please clarify the statement (item e.) “*Utilize Division protocols identified above in Option 1 or protocols approved by the Division for instream monitoring.*” Which protocols in option 1 is TDEC referring to?
2. Please clarify Section 4.6.1.1.2 on page 57 item h: “*Provisions for an administratively continued small MS4 general permit.*” If the MS4’s monitoring plan is for one permit cycle could the provisions for an administratively continued permit be “ensure the monitoring is complete for the permit cycle”?
3. Please provide a definition for “*wet weather screening*” as it pertains to section 4.6.2 item b. (Page 59).

Town of Mt Carmel, TN
Office of the Building Inspector
100 East Main Street
PO Box 1421
Mount Carmel, TN 37645
May 7, 2022

Tennessee Department of Environment and Conservation
Division of Water Resources
William R. Snodgrass--Tennessee Tower
312 Rosa L. Parks Avenue--11th Floor
ATTN: **Public Notice Coordinator**
Nashville TN 37243-1102

RE: Public Notice MMXXII-012 Pertaining to Small MS4 General Permit

Dear TDEC:

Thanks for the opportunity to provide comments regarding the MS4 General Permit renewal.

Mount Carmel is a small community which is included in the Kingsport Urbanized Area. The population is less than 6,000 with an area of less than 7 square miles. We have been included as an MS4 since the program was expanded to small communities in 2003.

There are no streams on the 303d list within Town limits and no construction activities of an acre or more since 2006. Despite this lack of covered activity, the Town has maintained a program which complies with the current MS4 permit. This is accomplished with a program director who is a part time employee with other duties and without costly digital mapping equipment.

We simply do not have the money to do what the draft permit requires.

With the above in mind, please give consideration to the attached comments.

Again, thanks.

Sincerely,

Pat Stilwell
Mayor

Enclosure
Comment Sheets

MOUNT CARMEL TN COMMENTS REGARDING THE DRAFT SMALL MS4 PERMIT PUBLIC
NOTICE NUMBER: MMXXII-012

COMMENT 1. PERTAINING TO SECTION 1.5 AND 2.2.1: These sections requires electronic reporting. Unless the submittal is by a means that involves personal computer software such as word or adobe, the Town will not be able to comply. Hard copy paper submittal needs to be an acceptable means of submittal as a normal process not on a waiver basis.

Comment 2: Section 2.2.2 and subpart 6.2 Hard Copy Option: Review of subpart 6.2 indicates that the only waiver that will be considered is in the event of “large-scale emergencies and/or prolonged electronic reporting system outages, . . .” Small Towns and Counties may not have the means of electronic submission nor the taxpayer money to upgrade. Paper submission needs to remain an option without a waiver requirement.

Comment 3: Draft subparts 4.2.1 and 4.2.2 as written jointly require the MS4 with a population of less than 25,000 to conduct and/or sponsor a minimum of 8 separate activities during each reporting year. This MS4 has a population of less than 6,000. There are no development, engineer, chemical applicators, pest control or similar businesses in the Town. We have been an MS4 since 2003 and held many stormwater meeting which were given public notice both in the newspaper and on the web page. Participation to almost all has been zero with no more than 2 to any event. Combined these subparts should require no more than 1 event during each reportable year.

Comment 4: Draft subpart 4.2.1.1, 4.2.1.2 and 4.2.1.3 requires record keeping for three categories of the public. This is overkill and a burden on the MS4. As drafted, scarce resources will be devoted to maintaining records to satisfy the Compliance Evaluators. The scarce resources would be more gainfully employed overseeing resolving real problems. The Public will become involved when there are development problems, especially in their back yards. A more realistic approach is a simple program as in the current permit. No more than one event needs to be required each report year for the combined target audiences for MS4s with a population of 25K or less.

Comment 5: Draft subpart 4.2.2 This part requires the program be designed to reach two major target audiences with tracking of the efforts including measurable goals of a combined minimum of 4 separate events for a MS4 with a population of 25K or less. This number of events for a small town is simply too much and combined with the same amount of separate events required for subpart 4.2.1 results in 8 required event. Combined 1 event per report year is recommended as being realistic and affordable.

Comment 6: Draft subpart 4.2.3c7 requires when a confirmed illicit discharge elimination will take more than 14 days that a corrective action plan be developed. Prior experience with leaking septic tanks shows that the TDEC solid waste division allows 30 days for correction of a leaking septic take with resulting solid waste flowing for 30 days before an enforcement by that division. Can something be done to bring this more in line with the 14 day requirement.

Comment 7: Draft subpart 4.2.3g as does the current permit requires a small MS4 Town to be sending messages to the higher government agencies (TEMA) of the potential negative impacts to surface water of spill clean-up activities. This should be a TDEC Nashville function.

Comment 8: Draft Table following subpart 4.2.3g. The first Management Measure is Storm sewer map with an annual report requirement to provide Spatial Rest Service Outfall Map Layer or Geodatabase/shapefile or a copy of the local storm sewer map. Not all MS4 have access to the first two options or the expertise to update to the TDEC layer. The map for this MS4 is over 20 printed three foot X two foot sheets with handwritten entries. It is an undue burden to require the taxpayer to pay for more expensive options. Does TDEC really need this data. The requirement needs to be eliminated.

Comment 9: Draft Table following subpart 4.2.3g. The last Management Measure is to provide interagency cooperation of hazardous waste or material spills response and cleanup. The measurable goal requires the MS4 to conduct or sponsor at least one activity each year with annual report requirements of much information. This is unnecessary and another case of TDEC imposing costly requirements on a MS4 with limited capacities. This management measure needs to be eliminated.

Comment 10: Draft sub part 4.2.5, 4.2.5.1, 4.2.5.2 and 4.2.5.3: These sections pertain to standards for stormwater management of new development and redevelopment projects following completion of construction. One questions these costly, manpower and record keeping intensive requirements for projects that are complete or in the final stages. All of this to monitor what should be vegetative covered landscape. For such fully developed finished projects, these requirements are at best unnecessary. They need to be eliminated or have a termination schedule tied to vegetative cover.

Comment 11: Draft sub part 4.6.1.1: The introduction to this section adds requirements to the monitoring program that are costly and beyond capacities of many MS4s, especially the small rural ones. For example, the draft proposes the monitoring and assessment program be designed with objectives including;

- "c. Assess the chemical, physical, and biological impacts to receiving waters resulting from stormwater discharges;

- d. Identify sources of specific pollutants; . . .

- f. Assess the overall health, evaluate long-term trends in receiving water quality and identify corrective actions."

For an MS4 with streams impaired due to e-coli only and no construction activity, the above is a financial burden to evaluate something over which we have little to no control (e-coli is primarily caused by leaking septic--controlled by TDEC solid waste or animal activity--agriculture is exempt from the stormwater program).

**BRIAN PADDOCK
ATTORNEY AT LAW
7094 Brittney Circle
BAXTER, TENNESSEE 38501
bpaddock@twlakes.net
(931) 858-9806 Voice (or fax by arrangement)
Cell: 931-510-7823**

Tennessee Department of Environment and Conservation
By email to Mrs. Ariel Wessel-Fuss
Ariel.Wessel-Fuss@tn.gov

May 17, 2022

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

Ladies and Gentlemen,

There are two major errors in the draft permit. The first is the exclusion of “uncontaminated” roof stormwater from the volume of water to be recognized and treated.

There is no such thing as uncontaminated stormwater. The Clean Air Act as implemented by TDEC attempts to limit release to the atmosphere of both particulates and various gases which are noxious or which become pollutants when combined with atmospheric moisture or other gases, including oxygen.

Our control of releases to the atmosphere by transport and industry is limited and imperfect.

Would you drink stormwater from a down spout?

I agree with Mr. Paul Davis that this provision should be eliminated for the many reasons he states.

I believe that this provision of the draft permit is subject to challenge as a violating the Clean Water Act and EPA regulations. As Mr. Davis stated so clearly:

EPA rules at 40 CFR 122.34 require that MS4 permits require, at minimum, that MS4s “reduce the discharge of pollutants from [their] discharges to the maximum extent practicable.” And at Part (5) of that section the rule requires controls are in place that would prevent or minimize water quality impacts.”

When litigated TDEC will be unable to defend this provision lacking any scientific evidence that roof runoff is ever “uncontaminated”.

Certainly the state statute that directs TDEC to devise a permit that achieves the minimum of the maximum will offer no defense and will likely be invalidated in the same litigation.

Mr. Davis also points out the error in the provisions on buffer zones:

[The new draft explicitly allows infiltration-based stormwater control measures in the riparian buffer. In a discussion of preferred vegetation in the buffer zone, Part 4.2.5.4.b. (page 36) states that “riparian buffers may be composed of ... infiltration-based SCMs”; while Part 4.2.5.4.c. (page 37) notes that permittees “may establish permissible land uses or activities within the buffer, [including] infiltration-based SCMs.”

Given the increase in high volume precipitation we are experiencing due to climate change buffer zones must operate at a maximum effectiveness. TDEC should not weaken buffer zones by allowing infiltration-based stormwater control measures in riparian buffer zones. This invites more flooding and a huge enforcement challenge when SCMs are disabled by flooding and silt.

I look forward to seeing the proposed final permit. This permit needs to be as strong as possible because it deals with the single largest water related problem we have in urban Tennessee. Stormwater management is becoming more of a challenge as climate changes the pattern of precipitation which overwhelms our current efforts to retain and percolate it. Flood control in urban areas with large areas of impermeable surfaces must begin with stormwater controls, the provenance of TDEC.

Sincerely,

Brian Paddock, Esq.



**STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION**

**ENVIRONMENTAL DIVISION
ENVIRONMENTAL COMPLIANCE OFFICE**
SUITE 900, JAMES K. POLK BUILDING
505 DEADERICK STREET
NASHVILLE, TENNESSEE 37243-1402
(615) 741-3655

JOSEPH GALBATO, III
INTERIM COMMISSIONER

BILL LEE
GOVERNOR

May 23, 2022

Mrs. Ariel Wessel-Fuss
Tennessee Department of Environment and Conservation
Division of Water Resources
William R. Snodgrass Tennessee Tower
312 Rosa L. Parks Avenue
Nashville, TN 37243

Re: Comments on Proposed Small MS4 General Permit

The Tennessee Department of Environment and Conservation (TDEC) has recently issued a draft permit for Authorization to Discharge Under the National Pollutant Discharge Elimination System (NPDES) From Small Municipal Separate Storm Sewer Systems (MS4) for public. The Tennessee Department of Transportation (TDOT) respectfully submits the following comments regarding the draft permit.

1. **Section 3.1:** This section states that TDEC may require an MS4 to create a Corrective Action Plan if stormwater discharges from the MS4 are determined to cause or contribute to an in-stream exceedance of water quality standards. There are presently no promulgated standards in Tennessee regulating MS4 stormwater discharges for the parameters specified in this section (i.e., nutrients, pathogens, siltation). The permit must include the criteria and methodology by which an MS4 can quantitatively determine if its stormwater discharges contribute to an exceedance of the water quality standards that presently are defined only for in-stream water conditions.
2. **Section 3.1.1:** This section requires the permittee to implement stormwater pollutant reductions consistent with any applicable Waste Load Allocations (WLA) in a TMDL. The WLA in TMDLs are specified only for in-stream concentrations and there are presently no promulgated standards in Tennessee regulating MS4 stormwater discharges for the parameters that could be the subject of a TMDL. The permit must include the acceptable methodology by which an MS4 can quantitatively determine how an MS4's stormwater

discharges would impact the in-stream pollutant levels to be reduced according to the WLA TMDL requirements.

3. **Section 3.1.2:** This section requires the permittee to implement stormwater pollutant reductions for waters with unavailable parameters that are not subject to a TMDL. The permit must include the acceptable methodology by which an MS4 can quantitatively determine if its MS4 stormwater discharges are significant (i.e. not de minimis) contributors to the impairment. Impairments are defined only for in-stream concentrations and there are presently no promulgated standards in Tennessee limiting MS4 stormwater discharges for possible unavailable parameters.
4. **Section 4.2.3d:** This section requires the permittee to identify non-stormwater discharges or flows that are a “significant contributor of pollutants to the MS4”. What is the definition of “significant contributor of pollution” since there are few promulgated pollutant concentration limits for MS4 stormwater? Guidance on this definition and how a MS4 would quantitatively apply the definition should be provided to ensure consistent application of this requirement.
5. **Section 4.2.3.1a:** In addition to the location of each outfall, the permit-required mapping should include a basic description of the outfall structure (e.g., concrete pipe, metal pipe, box culvert, lined ditch, unlined ditch), its approximate size and an estimate of peak flow and/or drainage area. One issue identified by the Nutrient Task Force is that there is no reliable data available to estimate the nutrient contamination originating from MS4 stormwater discharges. This data would allow generation of such an estimate.

Additionally, since the TDOT MS4 borders most other MS4s, TDOT has found it useful to document where stormwater discharges from other MS4s flow onto the TDOT MS4. All MS4s that border another MS4 should share available mapping where stormwater from their MS4 discharges onto any adjacent MS4 as part of the outfall mapping.

6. **Section 4.2.5.1:** The permit should address circumstances whereby a permittee may exempt a new construction project from meeting all or part of the Permanent Stormwater Standards due to site physical restrictions, including: existence of karst features, near surface bedrock preventing infiltration, pre-existing soil contamination, presence of contractive or expansive soils in close proximity to structures, including

within 100 ft. of roadways, or other adverse conditions. The permit should allow for a MS4 to develop a list of exemptions or limitations in its Implementation Plan. The permit should also allow MS4s to create exemptions and/or off-site mitigation for projects in which environmental justice considerations would preclude acquisition of sufficient land area for installation of stormwater retention/infiltration structures or other stormwater control measures (SCMs).

7. **Section 4.2.5.2b:** The permit must more clearly explain the criteria to be used to determine the end of one rainfall event and the beginning of the subsequent event. If a 10-hour dry period between events is the standard defining separate events (per Section 8.1), does the 72-hour infiltration period begin after the completion of the 10-hour dry period, or retroactively from the last measured rainfall when the original rainfall event is eventually determined to have ended? Is there a minimum rainfall level that can occur during the 10-hour “dry” period without resetting the 10-hour interval requirement defining a separate storm event? In the definition of rainfall in Section 8.1, a threshold of 0.01 inches is specified, however, few rain gages in common use are accurate to ± 0.01 inches. U.S. EPA stormwater guidance (EPA 833-8-92-001) cites a threshold of 0.1 inches for rainfall events, which would seem to be a more appropriate and realistic value.
8. **Section 4.2.5.2c:** This section specifies Water Quality Treatment Volumes (WQTV) for various SCM types. The WQTV for manufactured treatment devices specifies “*maximum runoff generated from the entire design storm*” with the design storm apparently being the 1-year 24-hour precipitation depth. However, the calculation of peak treated flowrate in the design of a manufactured stormwater treatment device must be based on precipitation intensity and not precipitation depth. TDEC must specify a design storm precipitation **intensity** for this table to be meaningful for designing the proper treated-flow-rate for manufactured stormwater treatment devices.
9. **Section 4.2.5.2c and d:** The Permit’s Permanent Stormwater Management Program standards include a requirement that SCMs achieve an overall treatment efficiency of 80% TSS removal from the WQTV. TDEC needs to explain how to determine the baseline TSS concentration from which this 80% reduction would be calculated. For example, if the level of TSS in a MS4’s post-construction stormwater discharge can be demonstrated to be less than 50 mg/l, very few SCMs would be able to achieve 80% TSS removal (i.e. reduction of TSS to achieve a TSS level of 10 mg/l), however, a TSS level of no more than 50 mg/l in stormwater discharges would clearly be considered protective of water quality and achieve the goals of this

permit. The permit should specify a lower bound on TSS levels in MS4 post-construction stormwater levels that would be exempt from the 80% reduction requirement.

Alternately, TDEC should consider that the 80% TSS removal level could be specified as only required for post-construction stormwater discharges in which the subject stormwater discharge TSS levels have not been quantified or which have been demonstrated to exceed a TSS level of 150 mg/l, which is the TSS benchmark level for most sectors specified in the Tennessee Stormwater Multi-Sector General Permit for Industrial Activities, and thus presumed to be protective of water quality in Tennessee.

Additionally, since TSS concentrations in stormwater have been demonstrated to correlate with precipitation intensity, the 80% TSS removal requirement should not be applicable for rainfall events which exceed the 10-year 1-hour precipitation intensity for the subject location.

10. **Section 4.2.5.3:** This permit section requires off-site mitigation to be accomplished within the same USGS 12-digit hydrologic unit code (HUC) watershed as the new development project. However, mitigation for Aquatic Resource Alteration Permits (ARAPs) and other permitting in Tennessee now allow compensatory mitigation to be accomplished in at least the same USGS 8-digit HUC watershed, and in some cases even within neighboring 8-digit HUC watersheds. Although many traditional municipal Phase II MS4s may be located in a single HUC-12 watershed, the larger MS4s often bridge multiple watersheds. The permit should be modified to say that off-site mitigation must be performed within the same MS4 as the new development project, regardless of watershed boundaries, thus providing flexibility while still achieving the intent of the permit.
11. **Section 4.2.5.4:** TDEC should include the water quality benefits from the riparian buffers to be considered as part of the overall compliance with the Permanent Stormwater Standards. For example, recent TDOT sponsored research by Tennessee Technological University has found that roadside vegetated swales, which in many cases will be similar in configuration to riparian buffers, may provide run-off reduction of as much 70%, thus effectively achieving much of the prescribed 80% TSS removal requirement, and for many storm events complying with the WQTV reduction requirements. If TDEC does not include the water quality benefits from the riparian buffers to be considered as part of the overall compliance with the Permanent Stormwater Standards, this should be clearly stated in the new rules and the rationale for this position provided by direct discussion or citation.

12. **Section 4.2.5.4c:** This permit section should clearly state that SCMs can be allowed within the riparian buffers at the discretion of the MS4. For linear projects where the space between the new development and the water body may be limited, allowing the SCM within the buffer often will be unavoidable. Proper design of the SCM would ensure that it in no way reduces the effectiveness of the buffer, and special provisions for the maintenance of SCMs located within buffers would have to be part of the MS4's Implementation Plan. If an individual MS4 chooses to prohibit the location of SCMs within the buffers in their jurisdiction, the MS4 could include that in their ordinance and/or Implementation Plan.
13. **Section 4.6.1.1.2b:** Since there are few promulgated quantitative standards for MS4 stormwater quality in Tennessee, the permit needs to specify the criteria and/or methodology to be used to evaluate stormwater impacts to receiving waters.

If you have any questions, or require additional information and documentation, please contact me at Klint.Rommel@tn.gov or at 615-253-2419.

Sincerely,



Klint Rommel
TDOT Environmental Division
Environmental Facility Compliance Section Manager

cc: Karina Bynum, P.E., PhD, TDEC (TDEC/TDOT liaison)
Susannah Kniazewycz, P.E., TDOT
Carma Smith, TDOT
Project Files

From: louan t <tillmanlouan@gmail.com>
Sent: Sunday, May 22, 2022 5:12 PM
To: Ariel Wessel-Fuss
Subject: [EXTERNAL] draft small MS4 permit comments

*** This is an EXTERNAL email. Please exercise caution. DO NOT open attachments or click links from unknown senders or unexpected email - STS-Security. ***

Ariel,

Thank you for the opportunity to comment on the above referenced draft permit.

As an industry professional in stormwater management for more than 30 years there are a couple of things that I think warrant comment.

First is the comment IN SECTION 4.2.5.2 SECTION C about uncontaminated roof runoff not being included in the calculations. My concern is that there is no definition of what is to be considered uncontaminated. Nor how it is monitored or tested or to what standards. Further-what provisions are in place if that situation changes? For example-a new roof on a building that would result in the runoff being considered contaminated. Or something like a bird infestation that would cause the runoff to be considered contaminated. It seems that the more prudent approach would be for roof runoff to be included as a matter of course.

Another consideration is the comment on page 35 regarding the various methods allowed to determine a treatment method for the runoff. My concern is that one methodology is subjected to industry wide testing standards and the other 3 methods are not subjected to any testing at all. How is that equitable? But further, how does that ensure that the community is getting a valid system? The comment about "published reference standards" leaves the door wide open. In fact there are numerous "published references" that indicate the use of permeable pavers should be restricted to areas without deciduous tree canopies yet no such restriction is referenced in your draft. Nor is there any consideration for parking lots with oil leaks that cause perm paver failure. Several phase 1 cities (including Nashville) have experienced failures of permeable pavers-example McKays Books in West Nashville, the phone store in Green hills and even the Metro Nashville office on Second Avenue yet pavers are included here as if they are some sort of silver bullet cure-all and even given a favorable ranking in the chart and no third party performance verification required.

Further, it is common practice for biofiltration media to be hand mixed. The reference literature indicates this is an accepted practice. Even commercial blending operations allow the contractor to specify the blending mix. Without some sort of third party performance verification there is no certainty of performance standards at all. Why is there no certification process or testing required for this methodology since it also has a favorable status in the chart on page 35.

Thank you for your consideration.

Louan Tillman

615-738-6217

May 22, 2022

Mrs. Ariel Wessel-Fuss
Tennessee Department of Environment and Conservation
Division of Water Resources
William R. Snodgrass Tennessee Tower
312 Rosa L. Parks Avenue
Nashville, TN 37243

Re: Comments on Proposed Small MS4 General Permit

1. **Section 1.4d:** This section prohibits stormwater discharges that would “cause or contribute to an in-stream exceedance of water quality standards.” The permit must include the criteria and methodology by which a MS4 can quantitatively determine if its stormwater discharges “cause or contribute” to an exceedance of the water quality standards that are currently defined by TDEC only for in-stream water pollutant concentrations and/or loadings. Simply evaluating the in-stream conditions will not determine if the MS4 stormwater discharges are the cause of in-stream exceedances. Many other non-stormwater contaminant sources could be the cause, including atmospheric deposition, failing septic systems, industrial discharges, and others, that are beyond the control of a MS4. There are presently no promulgated standards in Tennessee regulating MS4 stormwater discharges. The actual impact that a MS4’s stormwater discharge would have on in-stream water quality parameters is complex and dependent on several site specific factors, including volume and velocity of the stormwater discharge relative to the stream flow at the discharge point; sediment transport conditions in the stormwater discharge; physical and hydraulic properties of the stormwater and stream flow, among others. If the permit cannot provide the criteria and methodology by which a MS4 can quantitatively determine if its stormwater discharges “cause or contribute” to an exceedance of the water quality standards, this section should be deleted. Alternatively, TDEC should include benchmark MS4 stormwater contaminant levels, similar to those provided in the Tennessee Multi-Sector Permit, to provide the permittees guidance in determining what MS4 stormwater contaminant levels could “cause or contribute to an in-stream exceedance of water quality standards.”
2. **Section 1.4e:** This section prohibits stormwater discharges of “pollutants at levels that would be in violation of a specific wasteload allocations (WLA).” Since stormwater in and of itself does not meet the definition of what constitutes a pollutant (see *Virginia Department of*

Transportation, et al, v. EPA, et al., No. 12-775 (E.D. Va. 2013), the permit must define the acceptable methodologies by which a MS4 can quantitatively determine how a MS4's stormwater discharges would impact the in-stream pollutant levels to be reduced according to the WLA TMDL requirements. In Tennessee, the MS4 WLAs in TMDLs are specified only for in-stream concentrations and there are presently no promulgated standards in Tennessee regulating MS4 stormwater discharges for the parameters that could be the subject of a TMDL. The actual impact that a MS4's stormwater discharge would have on in-stream pollutant levels is complex and dependent on several site specific factors, including volume and velocity of the stormwater discharge relative to the stream flow at the discharge point; sediment transport conditions in the stormwater discharge; physical and hydraulic properties of the stormwater and stream flow; among others. If the permit cannot provide the criteria and methodology by which a MS4 can quantitatively determine if its stormwater discharges include "pollutants at levels that would be in violation of a specific wasteload allocations (WLA)", this section should be deleted.

3. **Section 3.1:** This section states that TDEC may require a MS4 to create a Corrective Action Plan if stormwater discharges from the MS4 are determined to cause or contribute to an in-stream exceedance of water quality standards. Since stormwater in and of itself does not meet the definition of what constitutes a pollutant (see *Virginia Department of Transportation, et al, v. EPA, et al.*, No. 12-775 (E.D. Va. 2013), the permit must include the criteria and methodology by which a MS4 can quantitatively determine if its stormwater discharges contribute to an exceedance of the water quality standards that presently are defined only for in-stream water pollutant concentrations. Simply evaluating the in-stream conditions will not determine if the MS4 stormwater discharges are the cause of in-stream exceedances. Many other non-stormwater contaminant sources could be the cause, including atmospheric deposition, failing septic systems, industrial discharges, and others, that are beyond the control of a MS4. There are presently no promulgated standards in Tennessee regulating MS4 stormwater discharges for the parameters specified in this section (i.e. nutrients, pathogens, siltation). The actual impact that a MS4's stormwater discharge would have on in-stream pollutant concentrations is complex and dependent on several site specific factors, including volume and velocity of the stormwater discharge relative to the stream flow at the discharge point; sediment transport conditions in the stormwater discharge; physical and hydraulic properties of the stormwater and stream flow; among others. If the permit cannot provide the criteria and methodology by which a MS4 can quantitatively determine if its stormwater discharges "cause or contribute" to an exceedance of the water quality standards, this section should be deleted.

- 4. Section 3.1.1:** This section requires the permittee to implement stormwater pollutant reductions consistent with any applicable WLA in a TMDL. Since stormwater in and of itself does not meet the definition of what constitutes a pollutant (see *Virginia Department of Transportation, et al, v. EPA, et al.*, No. 12-775 (E.D. Va. 2013), the permit must include the acceptable methodologies by which a MS4 can quantitatively determine how a MS4's stormwater discharges would impact the in-stream pollutant levels to be reduced according to the WLA TMDL requirements. The WLA in Tennessee TMDLs are specified only for in-stream concentrations and there are presently no promulgated standards in Tennessee regulating MS4 stormwater discharges for the parameters that could be the subject of a TMDL. If the permit cannot provide the criteria and methodology by which a MS4 can quantitatively determine if its stormwater discharges lead to an exceedance of the WLA in a TMDL, this section should be deleted.
- 5. Section 3.1.2:** This section requires the permittee to implement stormwater pollutant reductions for waters with unavailable parameters that are not subject to a TMDL. The permit must include the acceptable methodology by which an MS4 can quantitatively determine if its MS4 stormwater discharges are significant (i.e. not de minimis) contributors to the impairment. Simply evaluating the in-stream conditions will not determine if the MS4 stormwater discharges are the cause of in-stream exceedances. Many other non-stormwater contaminant sources could be the cause, including atmospheric deposition, failing septic systems, industrial discharges, and others, that are beyond the control of a MS4. Impairments are defined only for in-stream concentrations and there are presently no promulgated standards in Tennessee limiting MS4 stormwater discharges for possible unavailable parameters. If the permit cannot provide the criteria and methodology by which a MS4 can quantitatively determine if its stormwater discharges are significant (i.e. not de minimis) contributors to the impairment, this section should be deleted.
- 6. Section 4.2.3d:** This section requires the permittee to identify non-stormwater discharges or flows that are a “significant contributor of pollutants to the MS4”. What is the definition of “significant contributor of pollution”, since there are few promulgated pollutant concentration limits for MS4 stormwater? Guidance on this definition and how a MS4 would quantitatively apply the definition should be provided to ensure consistent application of this requirement. If the permit cannot provide the criteria and methodology by which a MS4 can quantitatively determine if its stormwater discharges are significant (i.e. not de minimis) contributors of pollutants, this section should be deleted.

7. **Section 4.2.3.1a:** In addition to the location of each MS4 stormwater outfall, the permit required mapping should include a basic description of the outfall structure (e.g. concrete pipe, metal pipe, box culvert, lined ditch, unlined ditch, etc.), its approximate size and an estimate of peak flow and/or drainage area. One issue identified by the Tennessee Nutrient Task Force is that there is no reliable data available to estimate the nutrient contamination originating from MS4 stormwater discharges. This data would allow generation of such an estimate.

Additionally, since the TDOT MS4 borders most other MS4s, TDOT has found it useful to document where stormwater discharges from other MS4s flow onto the TDOT MS4. All MS4s that border another MS4 should be required to also map where stormwater from their MS4 discharges onto any adjacent MS4 as part of the outfall mapping.

8. **Section 4.2.5.1:** The permit should address circumstances whereby a permittee may exempt a new construction project from meeting all or part of the Permanent Stormwater Standards due to site physical restrictions, including: existence of karst features, near surface bedrock preventing infiltration, pre-existing soil contamination, presence of contractive or expansive soils in close proximity to structures (including within 100 ft. of roadways), or other adverse conditions. The permit should allow for a MS4 to develop a list of exemptions or limitations in its Implementation Plan. The permit should also allow MS4s to create exemptions and/or off-site mitigation for projects in which environmental justice considerations would preclude acquisition of sufficient land area for installation of stormwater retention/infiltration structures or other SCMs.
9. **Section 4.2.5.2:** TDEC should consider exempting from these performance standards any projects from which all stormwater from the effective impervious areas of the project directly discharge to rivers that drain over 100 square miles. Several other states have included similar exemptions to their post-construction stormwater performance standards (e.g. Stormwater Management Manual for Western Washington Appendix 1-A Page 173 in: <https://apps.ecology.wa.gov/publications/documents/1910021.pdf>). Waterbodies of that size are not impacted by stormwater runoff/recharge that would be an infinitesimal portion of their overall flow volume. Imposing these post-construction standards on such projects would require costs to be incurred that serve no environmentally justifiable purpose.
10. **Section 4.2.5.2b:** The permit must more clearly explain the criteria to be used to determine the end of one rainfall event and the beginning of the subsequent event. If a 10 hour dry period

between events is the standard defining separate events (per Section 8.1), does the 72 hour infiltration period begin after the completion of the 10 hour dry period, or retroactively from the last measured rainfall when the original rainfall event is eventually determined to have ended? Is there a minimum rainfall level that can occur during the 10 hour “dry” period without resetting the 10 hour interval requirement defining a separate storm event? The permit needs to define the answers to these questions more explicitly. In the definition of rainfall in Section 8.1, a threshold of 0.01 inches is specified, however, few rain gages in common use are accurate to ± 0.01 inches. U.S. EPA stormwater guidance (EPA 833-8-92-001) cites a threshold of 0.1 inches for rainfall events, which would seem to be a more appropriate and realistic value.

11. **Section 4.2.5.2c:** This section specifies Water Quality Treatment Volumes (WQTV) for various SCM treatment types. The WQTV for manufactured treatment devices specifies “*maximum runoff generated from the entire design storm*” with the design storm apparently being the 1-year 24-hour precipitation depth. However, the calculation of peak treated flowrate in the design of a manufactured stormwater treatment device must be based on precipitation intensity and not precipitation depth. TDEC must also specify a design storm precipitation **intensity** for this table to be meaningful for designing the proper treated flow rate for manufactured stormwater treatment devices.

Additionally, the third sentence of this section allows “uncontaminated roof runoff” to be excluded from the WQTV. TDOT acquired atmospheric deposition samples at its stormwater sampling sites throughout the state and the results clearly indicated that atmospheric deposition (i.e. direct rainfall) was a significant contributor to the nutrient contamination observed in the coincident stormwater runoff samples. This result demonstrates that “uncontaminated roof runoff” is not possible and this sentence should be deleted from the permit.

12. **Section 4.2.5.2d:** The Permit’s Permanent Stormwater Managements requirements include a provision that Stormwater Control Measures (SCM) achieve an overall treatment efficiency of 80% TSS removal from the WQTV. TDEC needs to explain how to determine the baseline TSS concentration from which this 80% reduction would be calculated and the range of particle size for which the removal rate applies. For example, if the level of TSS in a MS4’s post-construction stormwater discharge can be demonstrated to be less than 50 mg/l, very few SCMs (or treatment trains of multiple SCMs) would be able to achieve 80% TSS removal (i.e. reduction of TSS to achieve a TSS level of 10 mg/l), however, a TSS level of no more than 50 mg/l in stormwater

discharges would clearly be considered protective of water quality and achieve the goals of this permit. The permit should specify a lower bound on TSS levels in MS4 post-construction stormwater levels that would be exempt from the 80% reduction requirement.

Alternately, TDEC should consider that the 80% TSS removal level could be specified as only required for post-construction stormwater discharges in which the subject stormwater discharge TSS levels have not been quantified or which have been demonstrated to exceed a TSS level of 150 mg/l, which is the TSS benchmark level for most sectors specified in the Tennessee Stormwater Multi-Sector General Permit for Industrial Activities, and thus presumed to be protective of water quality in Tennessee.

Additionally, since TSS concentrations in stormwater have been demonstrated to correlate with precipitation intensity, the 80% TSS removal requirement should not be applicable for rainfall events which exceed the 10-year 1-hour precipitation intensity for the subject location.

13. **Section 4.2.5.3:** This permit section requires off-site mitigation to be accomplished within the same USGS 12-digit hydrologic unit code (HUC) watershed as the new development project. However, mitigation for ARAPs and other permitting in Tennessee now allow compensatory mitigation to be accomplished in at least the same USGS 8-digit HUC watershed, and in some cases even within neighboring 8-digit HUC watersheds. Although many traditional municipal Phase II MS4s may be located in a single HUC-12 watershed, the larger MS4s often bridge multiple HUC-12 watersheds. The permit should be modified to say that off-site mitigation must be performed within the **same MS4** as the new development project, regardless of watershed boundaries, thus providing flexibility to the permittees while still achieving the intent of the permit.
14. **Section 4.2.5.4:** TDEC should include in this section an opportunity for MS4s to allow the water quality benefits from the riparian buffers to be considered as part of the overall compliance with the Permanent Stormwater Standards. For example, recent TDOT sponsored research by Tennessee Technological University has found that roadside vegetated swales, which in many cases will be similar in configuration to riparian buffers, may provide run-off reduction of as much 70%, thus effectively achieving much of the prescribed 80% TSS removal requirement, and for many storm events complying with the WQTV reduction requirements. If TDEC does not include the water quality benefits from the riparian buffers to be considered as part of the overall

compliance with the Permanent Stormwater Standards, this should be clearly stated in the new permit and the rationale for this position provided by direct discussion or citation.

15. **Section 4.2.5.4c:** This permit section should clearly state that SCMs can be allowed within the riparian buffers at the discretion of the MS4. For linear projects where the space between the new development and the water body may be limited, allowing the SCM within the buffer often will be unavoidable. Proper design of the SCM would ensure that it in no way reduces the effectiveness of the buffer, and special provisions for the maintenance of SCMs located within buffers would have to be part of the MS4's Implementation Plan. If an individual MS4 chooses to prohibit the location of SCMs within the buffers in their jurisdiction, the MS4 could include that in their ordinance and/or Implementation Plan.
16. **Section 4.2.5.7b:** This permit section should also include a requirement that the permittee's program regarding SCM maintenance must include emergency response procedures that are to be implemented when an abandoned non-functioning SCM is impacting adjacent properties due to its inability to manage the runoff directed to the SCM. If the responsible property owner cannot be found, or if the property has entered bankruptcy, the permittee's program must identify how any required emergency maintenance actions and remediation of adjacent properties would be performed.
17. **Section 4.6.1.1.2b:** The Option 2 monitoring plan includes a requirement to "evaluate stormwater impacts to the receiving waters." Since there are few promulgated quantitative standards for MS4 stormwater quality in Tennessee, again, the permit needs to specify the criteria and/or methodology to be used to "evaluate" stormwater impacts to the receiving waters. The actual impact that a stormwater discharge would have on in-stream pollutant concentrations is complex and dependent on several site specific factors, including volume and velocity of the stormwater discharge relative to the stream flow at the discharge point; sediment transport conditions in the stormwater discharge; physical and hydraulic properties of the stormwater and stream flow; among others. Simply evaluating the in-stream conditions will not determine if the MS4 stormwater discharges are the cause of in-stream exceedances. Many other non-stormwater contaminant sources could be the cause, including atmospheric deposition, failing septic systems, industrial discharges, and others, that are beyond the control of a MS4. TDEC should either include benchmark MS4 stormwater contaminant levels, similar to those provided in the Tennessee Multi-Sector Permit, to provide the permittees guidance in determining what MS4

stormwater contaminant levels are significant impacts to the receiving waters, or delete the requirement to “evaluate stormwater impacts to the receiving waters.”

Please do not hesitate to call or email me if you have any questions.

Michael L. Cramer, P.E., CPESC
EnSafe Inc.

A handwritten signature in black ink, reading "Michael Cramer". The signature is written in a cursive style with a large, stylized "M" and "C".

mcramer@ensafe.com

865-384-5813



Memorandum

*To: Tennessee Department of Environment and Conservation
Division of Water Resources
Attention: Ariel Wessel-Fuss*

From: Tennessee Stormwater Association

Date: May 23, 2022

Subject: Compilation of TNSA Member Comments Submitted on Proposed Draft Small MS4 General Permit

The TNSA Policy Committee solicited review comments from TNSA members on the Proposed Draft Small MS4 General Permit. The comments received are provided below and are submitted here on behalf of our large and diverse membership. Should you have any questions or wish to discuss these comments with TNSA, please do not hesitate to contact us.

GENERAL COMMENTS

- The draft permit seems to apply a “one size fits all” approach in that it prescribes BMPs, measurable goals, and reporting deliverables. This is a significant divergence from past permits, which allowed permittees to craft their SWMP around their local stream impairments, citizen complaints, water quality priorities, and water quality goals. This approach does not recognize that inherent differences exist among local governments and their individual capabilities to determine and ensure which BMPs are effective. The Division should refrain from prescribing BMP descriptions and the types, number, and measurable goals for MCMs and instead focus on compliance minimums.
- The draft permit includes a considerable increase in the level and specificity of required documentation and reporting. Numerous procedures, processes, and plans are identified, as well as an annual solicitor’s certification, SWMP Evaluation Report, and the annual reporting deliverables identified in management measure tables. Some of these items seem unnecessary or redundant (detailed comments will follow). This increase in the level and specificity of required documentation and reporting will require substantially more permittee resources to implement and maintain at a time when permittees are resource-stressed already. The changes will force permittees to focus on getting paperwork done and keeping it updated each year rather than meaningful permit compliance and water quality protection. The Division should re-examine the level and specificity of required documentation and reporting in the draft permit and seek ways to reduce the administrative

burden on permittees. For most of the new sub-plans, reports, procedures, and annual reporting requirements in the draft permit, a deadline for implementation is not provided. Does this mean permittees are required to step-up administratively immediately when the permit becomes effective? Given the substantial increase in documentation required by this permit and the potential need to secure additional staff or outside resources to prepare these items, permittees will need significant additional time to budget, plan, and prepare the new plans, reports, and procedures. This is especially true for the upgrade in compliance tracking required in the annual report. This change alone will require permittees to revisit current methods of compliance tracking, determine the changes needed to meet the new permit, coordinate with the departments affected, and allocate funding/resources required to upgrade. As well, the new permit could become effective near the beginning of a municipal fiscal year (July 2022) for many permittees. For these permittees, their FY22-23 budgets do not include funding to deal with such a substantial increase in the permit's administrative needs. As a result, at least three years from the effective date of the permit may be needed for permittees to budget, plan, and then implement the necessary changes.

- There are many different, overlapping compliance timeframes in the permit. Can TDEC put together a compliance timeline/checklist for permittees to follow to help avoid the confusion?
- Throughout the permit, remove the words “all”, “any” and 100% as it is all-inclusive and suggests that missing any one element or partial element of the permit, no matter how small or insignificant, would put the permittee at risk for violation of the permit. Specifically, the phrase “100% of all” is used frequently in the “Measurable Goals” column of the permit compliance tables.

HOT BUTTON TECHNICAL ISSUES

- Section 4.2.5.2.c., on page 33, notes “Uncontaminated roof runoff may be excluded from the WQTV.” This sentence should be removed from the permit. If included, the permit would allow designers of post-construction stormwater control measures to pretend that some portion, even the major portion, of impervious surface area simply doesn't produce runoff when it rains. In urban settings, no runoff from impervious surfaces, including roofs, is uncontaminated, much less permanently uncontaminated. Contaminants – solid and dissolved - come from a range of deposition sources like dust, pollen, fallout from combustion, from wildlife... as well as from weathering and decomposition of the roof itself. A Google search will bring up several confirming studies. If maintained, TDEC should provide in the rationale clear scientific evidence that roofs do not contribute detrimentally to runoff and do not deliver pollutants to streams/rivers.
- Section 4.2.5.4.b and c, on pages 36 and 37, explicitly allows infiltration-based stormwater control measures in the riparian buffer. It is well-accepted that the best control for post-construction runoff is for it to infiltrate into suitable soil or media. Creekside stream buffer

areas may be the worst location for infiltration-based stormwater control measures. First, the water table adjacent to a stream would likely prevent any meaningful infiltration, particularly during a storm event. Second, one of the keys to effective infiltration is to keep the infiltration area from getting blanketed with silt. High stormwater flows in buffer areas will surely deliver silt to these practices which will quickly render them ineffective. The permit should not speak to the allowance of these practices in riparian buffers and the local governments should have complete discretion regarding where infiltration-based stormwater practices may be placed.

DETAILED COMMENTS

- Section 3.1: This section states that TDEC may require an MS4 to create a Corrective Action Plan if stormwater discharges from the MS4 are determined to cause or contribute to an in-stream exceedance of water quality standards. The permit must include the criteria and methodology by which an MS4 can quantitatively determine if its stormwater discharges contribute to an exceedance of the water quality standards that presently are defined only for in-stream water conditions. There are presently no promulgated standards in Tennessee regulating MS4 stormwater discharges for the parameters specified in this section (i.e. nutrients, pathogens, siltation).
- Section 3.1.1: This section requires the permittee to implement stormwater pollutant reductions consistent with any applicable Waste Load Allocations (WLA) in a TMDL. The permit must include the acceptable methodology by which an MS4 can quantitatively determine how an MS4's stormwater discharges would impact the in-stream pollutant levels to be reduced according to the WLA TMDL requirements. The WLA in TMDLs are specified only for in-stream concentrations and there are presently no promulgated standards in Tennessee regulating MS4 stormwater discharges for the parameters that could be the subject of a TMDL.
- Section 3.1.2: This section requires the permittee to implement stormwater pollutant reductions for waters with unavailable parameters that are not subject to a TMDL. The permit must include the acceptable methodology by which an MS4 can quantitatively determine if its MS4 stormwater discharges are significant (i.e. not de minimis) contributors to the impairment. Impairments are defined only for in-stream concentrations and there are presently no promulgated standards in Tennessee limiting MS4 stormwater discharges for possible unavailable parameters.
- Section 4.1.1, Pg 12. Implementation Plan - Submit implementation plan for permanent stormwater management program 90 days from the Effective Date on the Notice of Coverage. Please make it line up with when our annual reports are due so that we can put them through the same process with our annual report for public meeting. – Recommendation is to say 90 days or when our annual report is due, whichever is later.

- Section 4.1.1, Pg 12. Implementation Plan – can the State provide a framework or outline of what is expected to be provided in such an implementation plan?
- Section 4.1.2, Pg 13 The table in this section notes the permit has 18 months to implement changes to regulatory mechanisms. However, the Table in Section 4.2.4, Page 30 gives a 12 month timeline for changes to regulatory mechanisms. This is inconsistent and should be corrected.
- Section 4.2.1 Public Education & Outreach. Holistic comment on this section. For multiple permit cycles, MS4s have implemented locally derived public education and outreach plans that have been compliant with the NPDES program. This permit is a significant leap forward in the prescriptive nature of the permit, defining very specifically numerous management measures and very specific (but arbitrary) numbers of activities. This approach will likely require a complete overhaul of local government outreach programs to ensure compliance with every single element of these sections. Is that TDECs intent? If not, can this section be structured such that local governments have more flexibility to continue implementing programs that already cover these management measures more broadly? TDEC still maintains the authority to review the PIE and make adjustments through audits to verify that the intent of the permit is being met without burdening all permittees with a very prescriptive list of requirements.
- Section 4.2.1 Public Education & Outreach. Can the State clarify the Measurable Goals in the tables of this section? The permit says “conduct and/or sponsor a minimum number of activities that address each of the issues identified under management measures...” It goes on to list the associated number of activities. Section 4.2.1.1 has 5 bullet points under “Management Measure.” Is a permittee with less than 25,000 (as an example) required to conduct 3 activities per management measure (thus, $3 \times 5 = 15$ activities), OR can they conduct 3 activities that include all 5 of the management measure topics? If the former example is desired, TDEC should consider the feasibility of such small MS4s having the resources and staff to conduct numerous activities. This is only one of three categories in this section so the number of required activities would grow significantly.
- Section 4.2.1.1 What level of involvement distinguishes collaborating from sponsoring in a MCM1/MCM2 activity? Is collaboration between 2 or more MS4’s considered a sponsored event?
- Section 4.2.1 and 4.2.2 Related to Public Outreach and Public Involvement, can one event have multiple “activities” within it and thus achieve the requirements of both Public Education and Outreach and Public Involvement/ Participation as discussed in section 4.2.1 & 4.2.2?
- Section 4.2.3, Page 24, d.: Please define “Significant” as it pertains to this section.

- Section 4.2.3 Page 25: Please elaborate on how to comply with the annual reporting requirements of “% of non-stormwater discharges or flow investigated as a significant contributor of pollutants to the MS4”. What denominator is used to find this percentage? Also please define “significant” as it pertains to this section.
- Section 4.2.3 Illicit Discharge Detention and Elimination. Page 26. Multiple boxes in this Table speak to compliance in 100% of all circumstances. Based on the experience of implementing an IDDE program, a permittee may not always be able to determine the source and discharger for a confirmed illicit discharge. So, being able to initiate enforcement and/or receive corrective action plans for 100% of confirmed issues may not always be possible. The table should be modified to allow for exceptions when due diligence is performed so that the permittee does not have compliance liability if they can not readily identify a source or discharger.
- Section 4.2.5 Please add a definition for “Stormwater Control Measures (SCMs)”, specifically covering how the term pertains to section 4.2.5 of the draft permit.
- Section 4.2.5.2, page 33, item b. Please clarify “information relevant” and “readily available” in the following statement: “Information relevant to identified SCMs should be made readily available.”
- Section 4.2.5.2, page 33, item b.: Please define “Significantly limit” as it pertains to the following statement: “If the permittee decides to significantly limit the number of SCM options it must be documented in the stormwater management program how the performance standards of Tennessee Rule 0400-40-10-.04 can be met with the limited set of control measures that are allowed.
- Section 4.2.5.6. TDEC should not be dictating the specific elements of the Plan Review and installation verification process, as the process is different across all communities and varies widely based on the size of the community, the resources/staff available, amount of development occurring, etc. The permit needs to only say “each MS4 must document the process for performing plan review and verification of appropriate installation.”
- Section 4.2.5.9, Page 42 - Establish a time frame for review of all plans and review 100% of all plans within that timeframe – I don’t know why TDEC should make MS4s set a timeframe for plans review process for our communities. This is completely unnecessary and each MS4 should be able to decide how their process works. If a process is in place, then the MS4 is meeting the intent. What regulation gives TDEC the authority to regulate the time frame for local governments to perform plan reviews?
- Section 4.6.1.1.1 On Page 55 the draft states “Adopt existing survey protocols such as the ones available through the Natural Resources Conservation Service, State of Maryland Department of Natural Resources, and/or the State of Tennessee Habitat Assessment Protocol and related

Stream Survey Field Sheets; or...". Please provide references to the survey protocols listed here.

- Section 4.6.1.1.1 on page 55 the draft states that the permittee may Develop their own protocol which must address 14 Visual Survey Assessment elements: (Channel Condition, Hydrologic Alteration, Bank Condition, Riparian Area Condition, Canopy Cover, Water Appearance, Nutrient Enrichment, Animal Or Human Waste Presence, Pools, Barriers, Fish Habitat Complexity, Invertebrate Habitat, Invertebrate Community, Riffle Embeddedness, Other as defined by the permittee) Must all 14 elements listed above be assessed in each stream?
- Section 4.6.1.1.2 on page 56 please clarify the statement (item e.) "Utilize Division protocols identified above in Option 1 or protocols approved by the Division for instream monitoring." Which protocols in option is TDEC referring to?
- Please clarify Section 4.6.1.1.2 on page 57 item h: "Provisions for an administratively continued small MS4 general permit." If the MS4's monitoring plan is for one permit cycle, could the provisions for an administratively continued permit be "ensure the monitoring is complete for the permit cycle"?
- Please provide a definition for "wet weather screening" as it pertains to section 4.6.2 item b. (Page 59).
- Section 4.7.1 Annual Report Requirements for Legal Authority: An attorney's certification of the small MS4s SWMP is inappropriate. There is nothing in any of the references used in the rationale to support such a permit requirement. Many of the items specified in this draft permit are legally questionable (property right violations at the least, extortion at the worst). To have an attorney go through every requirement of the small MS4's SWMP is onerous. Has TDEC obtained the State Attorney General's certification that the requirements put forth by this permit are legal? How's the TWRA loss in court because of property rights violations been rectified?

From: Vince Pishner <vincepishner@yahoo.com>
Sent: Sunday, May 22, 2022 7:15 AM
To: Ariel Wessel-Fuss
Subject: [EXTERNAL] Additional Comments Pertaining to the Draft Small MS4 General Permit

Good Morning:

I have two comments in addition to the ones sent Friday.

They are:

1. Pertaining to Section 4.2.5.2b. This section begins by requiring SCMs be designed to provide full treatment . . . for the life of new development or redevelopment project. Please define life of the new development or redevelopment project.
2. Section 8.1 Definition of Disturbed Area: This new definition includes a sentence that the area cannot be limited to only the portion of the total area that the site-wide owner/developer initially disturbs. As written, this can be read to mean the family building a single family residence which will disturb no more than a half acre on a platted lot of more than an acre is subject to permit requirements. If this is the intent, it goes against the premise of the program which is to regulate those projects which disturb an acre or more and will result in unneeded paperwork and costs to the owner/developer. Request this be clarified to leave no doubt that only projects that disturb an acre or more or are part of a larger common plan or development are subject to permit requirements.

Thanks for you consideration

Vince Pishner,
335 Allen Drive
Bulls Gap TN 37711

petition_signatures_jobs_33347102_20220522153050

Name	City	State	Postal Code	Country	Signed On
Sallie Ford	Signal Mountain	TN		US	2022-05-15
Margha Davis	Signal Mountain	TN	37377	US	2022-05-15
Brian Paddock	Cookeville	TN	38501	US	2022-05-15
Catherine Colby	Signal Mountain	TN	37377	US	2022-05-15
Sophie Workerger	Phoenixville	PA	19460	US	2022-05-16
Kacee Nazor	Signal Mountain	TN	37377	US	2022-05-16
Sandra Koss	Signal Mountain	TN	37377	US	2022-05-16
Reese O'Brien	Collegeville	PA	19426	US	2022-05-16
Phoebe Linnell	Quincy	MA	2169	US	2022-05-16
Sandra Kurtz	Chattanooga	TN	37404	US	2022-05-16
Keith Barry	Nashville	TN	37205	US	2022-05-16
Ben Workerger	Chattanooga	TN	37405	US	2022-05-16
Olin Ivey	Chattanooga	TN	37406	US	2022-05-16
Dawson Wheeler	Signal Mountain	TN	37377	US	2022-05-16
Cindy Mayer	Crossville	TN	38572	US	2022-05-16
Susannah Murdock	Signal Mountain	TN	37377	US	2022-05-16
Mary Hutson	Signal Mountain	TN	37377	US	2022-05-16
Anne Hagood	Chattanooga	TN	37405	US	2022-05-16
Eric Fleming	Rossville	GA	30741	US	2022-05-16
Robert Blough	Signal Mountain	TN	37377	US	2022-05-16
Angela Cassidy	Signal Mountain	TN	37377	US	2022-05-16
Alex Harrison	Ooltewah	TN	37363	US	2022-05-16
Joe Davis	Signal Mountain	TN	37377	US	2022-05-16
Melissa Cantrell	Signal Mountain	TN	37377	US	2022-05-16
Dixie Riall	Chattanooga	TN	37412	US	2022-05-16
Axel Ringe	New Market	TN	37820	US	2022-05-16
Steven Sondheim	Memphis	TN	38117	US	2022-05-16
JoAnn McIntosh	Clarksville	TN	37043	US	2022-05-16
Donna Edwards	Walland	TN	37886-2246	US	2022-05-16

Lisa Lemza	Chattanooga	TN	37406	US	2022-05-16
Earl Hereford	Signal Mountain	TN	37377	US	2022-05-16
Sarah Houston	Memphis	TN	38103	US	2022-05-16
Gerald Thornton	Knoxville	TN	37934	US	2022-05-16
Nancy Bell	Rogersville	TN	37857	US	2022-05-16
Cindy Whitt	Franklin	TN	37064	US	2022-05-16
Gloria Griffith	Mountain City, Tennessee	TN	37683	US	2022-05-16
David Cantrell	Atlanta	GA	30303	US	2022-05-16
Carol Bishop	Signal Mountain	TN	37377	US	2022-05-16
Ted Tumelaire				US	2022-05-16
Emily Ellis	Knoxville	TN	37917	US	2022-05-16
Teresa Greer	Morristown	TN	37814	US	2022-05-16
Linda Collins	Chattanooga	TN	37415	US	2022-05-16
John Fraser	Franklin	TN	37064	US	2022-05-16
Carolyn Novkov	Surgoinsville	TN	37873	US	2022-05-16
Doug Carlson	Chattanooga	TN	37419	US	2022-05-16
Joni Evans	Springfield	TN	37377	US	2022-05-16
Nancy Caldwell	Signal Mountain	TN	37377	US	2022-05-16
Barbara G. Womack	Signal Mountain	TN	37377	US	2022-05-16
Caleb Womack	Soddy-Daisy	TN	37379	US	2022-05-16
Elaine Monteiro	Signal Mountain	TN	37377	US	2022-05-17
Seth Brown	Signal Mountain	TN	37377	US	2022-05-17
Diane Ryder	Signal Mtn.	TN	37377	US	2022-05-17
Mary Bales	Signal Mountain	TN	37377	US	2022-05-17
Susan Veal	La Vergne	TN	37086	US	2022-05-17
Rhonda L. Tantalo	Signal Mountain	TN	37377	US	2022-05-17
Alison Hoffmann	Chattanooga	TN	37412	US	2022-05-17
Anastasiya Petrushyna	Los Angeles		90009	US	2022-05-17
Joanne Beckman	Signal Mountain	TN	37377	US	2022-05-17
Maurice Edwards	New York	NY	10118	US	2022-05-17
Sue Shallow	Franklin	TN	37064	US	2022-05-17
Beth Morel	Signal Mountain	TN	37377	US	2022-05-17

Sarah McKenzie	Signal Mountain	TN	37377	US	2022-05-17
Lucy Ellis	Soddy-Daisy	TN	37379	US	2022-05-17
Sean Richards	Signal Mountain	TN	37377	US	2022-05-17
Emily Mathis	Chattanooga	TN	37415	US	2022-05-17
Bill Kornrich	Sneedville	TN	37869	US	2022-05-17
Darlene Carlson	Chattanooga	TN	37421	US	2022-05-17
Katie Larue	Chattanooga	TN	37405	US	2022-05-17
Jhansi Chiluka	Boston		2215	US	2022-05-17
Kabob Bobs	thetown		none	US	2022-05-17
MaryBeth Sutton	Signal Mountain	TN	37377	US	2022-05-17
Nikia Payne	Signal Mountain	TN	37377	US	2022-05-17
Ron Shrieves	Knoxville	TN	37938	US	2022-05-17
Lubna Rai	Worcester		1605	US	2022-05-17
Bill Lusk	Chattanooga	TN	37405	US	2022-05-18
Smith, Gary	Signal Mountain	TN	37377	US	2022-05-18
Dalilah Holloman	Silver Spring		20903	US	2022-05-18
Shelley Vatter	Signal Mtn	TN	37377	US	2022-05-18
Tommy Pierecson	Sacramento		95822	US	2022-05-18
Billie Grace	Hopkinsville		42240	US	2022-05-18
Leslie Bell	Signal Mountain	TN	37377	US	2022-05-18
Trinity Coykendall	Seneca Falls		13148	US	2022-05-18
Damaren Johnson	Tallahassee		32305	US	2022-05-18
Casey Dell	Chattanooga	TN	37412	US	2022-05-18
Scott Banbury	McMinnville	TN	37110	US	2022-05-18
Jim Johnson	Chattanooga	TN	37405	US	2022-05-18
Brandi Prewitt	Nashville	TN	37216	US	2022-05-18
Dana Pittman	Somerville	TN	38068	US	2022-05-18
Michelle Mihale	New York	NY	10001	US	2022-05-18
Hyunjoo Kang	Newark		7112	US	2022-05-18
Mary Patricia A. Letcher	Cape May		8204	US	2022-05-19
Craig Walker	Harrison	TN	37341	US	2022-05-19
Anne Rittenberry	Signal Mountain	TN	37377	US	2022-05-19

David Benitez	Merced		95341	US	2022-05-19
Paula Cardone	Staten Island		10305	US	2022-05-19
Lyn Rutherford	109 Ochs Hwy, Chattanooga	TN	37409	US	2022-05-19
Tiia Sailstad	Chattanooga	TN	37415	US	2022-05-19
Eric Matravers	Signal Mountain	TN	37377	US	2022-05-19
Colin Womack	Chattanooga	TN	37405	US	2022-05-19
Casey Crook	Hixson	TN	37343	US	2022-05-19
Nancy Craig	Signal Mountain	TN	37377	US	2022-05-20
Courtney McMahan	Chattanooga	TN	37405	US	2022-05-20
Robert Richie	Signal Mountain	TN	37377	US	2022-05-20
Tim Stickney	Oklahoma City		73132	US	2022-05-20
Jessica Patty	Lima		45805	US	2022-05-21
Mary Dominick	Signal Mountain	TN	37377	US	2022-05-21
Eileen Long	Chattanooga	TN	37421	US	2022-05-21
Mary hernandez	Ooltewah	TN	37363	US	2022-05-21
Jill Chambliss	Hixson	TN	37343	US	2022-05-21
Isabella Cregar	Nuevo		92567	US	2022-05-21
Kent Minault	Knoxville	TN	37917	US	2022-05-21
Lawrence Miller	Red Bank	TN	37415	US	2022-05-21
Davis Guedron	Chattanooga	TN	37415	US	2022-05-21
Ava Wentz	Las Cruces		88011	US	2022-05-22

Stormwater runoff is being redefined by proposed TNS00000, section 2.4.5.2 to exclude uncontaminated roof runoff from the state's standards of managing stormwater.

Why should we care and what does this mean? We should care, because it's not just the QUALITY of the stormwater runoff, but the QUANTITY of the stormwater runoff that has significant economic and environmental impact.

The standards for dealing with permanent stormwater runoff address both the pollutants in the water and the volume of water. Both are important and require treatment measures to protect our infrastructure, communities, towns and our homes.

A 1,000 sq.ft. of roof generates 625 gallons of stormwater in a 1-inch rain and a 44,000 sq.ft. roof as on a typical grocery store creates 27,500 gallons of stormwater. The standards are the foundation of the state's program that require developments (new and renewed) to design and install storm water control measures (SCMs) that manage pollutants in the water and the volume of the water in runoff.

It's pretty obvious that we need to manage all stormwater. There are consequences to all the runoff created by the impermeable surfaces of new developments – think concrete pads, homes, apartments, office buildings, driveways, parking lots and ROOFS. Further, erosion and loss of topsoil, damage to infrastructure like bridge footings and roads, increasingly deep and wide gullies that won't allow water to recharge the land, will all lower the water table and make trees and shrubs more vulnerable to death during our increasingly common dry periods. Trees falling and dying due to root instability and drought-induced death will have great economic consequences to utilities, businesses, communities, and individuals as dead trees must be removed and slopes and stormwater systems stabilized.

We want and need clean water. But managing the QUANTITY of stormwater runoff is critical and necessary too. Excluding roofs excludes a large part of the problem that needs to be managed. Identifying and including ALL the impermeable surfaces, including ROOFS is critical to managing the design and installation of appropriate SCMs. That way our communities don't suffer the consequence of casual, undersized stormwater management or succumb to the pressures of special interest groups that would benefit from the easing of the standards.

Please sign this petition requesting that the state remove the exclusion of uncontaminated roof runoff from section 2.4.5.2 . ROOFS are a large part of what affects runoff. ROOFS need to be included in the permit process. Your community will be better served by doing so.



May 23, 2022

TN Department of Environment and Conservation
Division of Water Resources
William R. Snodgrass - Tennessee Tower
312 Rosa L. Parks Avenue, 11th Floor
Nashville, Tennessee 37243-1102

Re: Comments on General NPDES Permit for Small Municipal Storm Sewer Systems Permit
Number TNS0000000

Via email

Dear Mrs. Ariel Wessel-Fuss,

The Harpeth Conservancy has worked with the TN Department of Environment and Conservation for over 20 years on stormwater management. These comments are focused on two key points in the revised draft that Paul Davis highlighted in more depth in his comments to the Division on May 16, 2022. These comments from the Harpeth Conservancy incorporate those of Paul Davis as well.

1. Remove the proposal to exclude “uncontaminated roof runoff” from the determination of the water quality treatment volume in 4.2.5.2.c. for Permanent Stormwater Standards

This draft permit added an exclusion that seems to have come from draft permit comments to consider roof runoff “uncontaminated” and therefore water that does NOT need to be factored into water quality treatment volume to design the site’s stormwater management systems. This must be removed for several reasons. Runoff from roof tops absolutely contain pollutants, runoff from rooftops is a central stormwater water treatment requirement in stormwater design manuals across the country, and this provision would violate the state’s obligation under EPA rules 40 CFR 122.34 that require MS4 permits to reduce pollutant discharges to the “maximum extent practicable.” Please see the comments submitted by Paul Davis for citations of studies, the U. of TN stormwater design manual, federal stormwater rules, and more for details.

As Paul Davis points out in his comments there are several studies specifically focused on the pollution contribution from rooftop runoff that show runoff can contain bacteria, dust, pollen, fallout from combustion as well as the weathering of the roof top material itself over time. The federal requirement for TN to establish a permitting program for municipal stormwater systems (MS4s) is to reduce pollutant discharges to the “maximum extent practicable” and is for all

pollutants. It is not narrowly limited to one type, such as Total Suspended Solids (TSS) or another, which seem to be the argument by some to TDEC for this proposed exclusion. This exclusion is a seriously flawed proposal, especially when considering new developments in highly urban areas. Runoff from rooftops is a sizeable and sometimes dominant source of the runoff from an intensely developed site and must be treated in the water quality stormwater management system to achieve the regulatory requirement of “maximum extent practicable.” Here is the text from the permit for Permanent Stormwater Standards (4.2.5.2.) that clearly states the federal requirement:

“4.2.5.2. Permanent Stormwater Standards

a. The permanent stormwater management program must require new development and redevelopment projects to be designed to reduce pollutants to the MEP, as set forth herein. Compliance with permanent stormwater standards for new development and redevelopment projects is determined by designing and installing SCMs as established by Tennessee Rule 0400-40-10-.04 and complying with other requirements of Tennessee Rule 0400-40-10-.04.” ... (p. 33)

The text that needs to be removed is in 4.2.5.2.c.

“c. The water quality treatment design storm is a 1-year, 24-hour storm event as defined by Precipitation-Frequency Atlas of the United States. Atlas 14. Volume 2. Version 3.0. U.S. Department of Commerce. National Oceanic and Atmospheric Administration (NOAA), National Weather Service, Hydrometeorological Design Studies Center, Silver Springs, Maryland or its digital product equivalent. The water quality MTD treatment volume (WQTV) is a portion of the runoff generated from impervious surfaces at a new development or redevelopment project by the design storm, as set forth below. **Uncontaminated roof runoff may be excluded from the WQTV.** SCMs must be designed, at a minimum, to achieve an overall treatment efficiency of 80% TSS removal from the WQTV. ...”

Note, that section 4.2.5.2.f. already allows for a MS4 phase II program to offer reductions in the amount of water volume to be treated from 20% to 50% in certain situations. This addition to the permit in 2016 was contentious and was not broadly supported by the conservation community at the time.

2. Remove proposal to allow infiltration-based SCMs (or any SCMs) in the riparian buffer- 4.2.5.4.b. and 4.2.5.4.c. (pp. 36-37)

One of the most debated aspects of the MS4 Phase II permitting program is the riparian buffer requirements with regard to how to set minimum widths, the management of the riparian buffer, and what activities are appropriate to locate in the riparian buffer. Scientific literature is extensive on the need for riparian buffers to reduce water pollution, to reduce erosion, to reduce degradation of the stream channel, and more. It has been established since the inception of stormwater management regulatory programs that the riparian buffer along waterways is an additional protection independent of the stormwater pollution prevention plans and permanent stormwater management design and plans.

The Definition of the “buffer zone” and “Water Quality Riparian Buffer” are clear in the permit. These are “a permanent strip of natural perennial vegetation, adjacent to a stream, river, wetland,

pond, or lake that contains dense vegetation made up of grass, shrubs, and/or trees. The purpose of a water quality riparian buffer is to maintain existing water quality by minimizing risk of any potential sediments, nutrients or other pollutants reaching adjacent surface waters and to further prevent negative water quality impacts by providing canopy over adjacent waters.” (p. 73 and 84)

For over 20 years in Tennessee, stormwater control measures (SCMs) and the overall stormwater management design for the property are to be located outside of the regulatory riparian buffer. This draft permit needs to remove the proposed language to allow infiltration-based SCMs in the riparian buffer. This proposal conflicts with the definition of the riparian buffer since this would remove acreage of the riparian buffer. The permit already has the ability for the jurisdiction to have the option to reduce the width of the riparian buffer in certain situations to account for situations on the property.

Here are the two places to remove “infiltration-based SCMs” from the draft permit:

“4.2.5.4. Water Quality Riparian Buffers.

Permittees shall develop and implement a set of requirements to establish, protect, and maintain permanent water quality riparian buffers to provide additional water quality treatment in riparian areas of new development and redevelopment projects that contain streams, including wetlands, ponds, and lakes. Riparian buffers must meet the following minimum standards:

b. after the table- “The predominant vegetation within the minimum buffer width area should be trees. The remaining riparian buffers may be composed of herbaceous cover ~~or infiltration-based SCMs.~~ (p. 36 bottom)

c. “Permittees may establish permissible land uses or activities within the buffer, such as biking and walking trails, ~~infiltration-based SCMs,~~ selective landscaping, habitat improvement, road and utility crossings, or other limited uses as determined by the permittee.”.... (p. 37)

The Harpeth Conservancy’s long history in stormwater management

For over 20 years, the Harpeth Conservancy has worked with Williamson county, the city of Franklin, Metro Nashville, and other communities around middle TN on stormwater management, on stream restoration, and with the development and engineering profession on approaches that can improve water quality and reduce the risk of flooding and erosion. In 2003, Harpeth Conservancy secured a \$200,000 EPA grant with both Williamson County and the city of Franklin as partners to design stormwater approaches with representatives of the development and the engineering communities. In addition to a focus on riparian buffers, another key focus was on how to integrate nutrient reduction targets from the EPA’s Harpeth TMDL on low dissolved oxygen and nutrients into stormwater management.

Robert Karesh, TDEC’s Stormwater Program Coordinator, worked at Harpeth Conservancy on this grant after his position at the Williamson County Stormwater Coordinator and before his position at TDEC. One of Robert Karesh’s efforts while working at the Harpeth Conservancy was to launch the TN Stormwater Association that enables stormwater coordinators across the

state to confer and learn from experts. Our current Science Director, Dr. Ryan Jackwood, has served as a board member.

I served on Williamson County Stormwater Appeals board since its formulation in 2004 as the Environmental Representative. This included serving as the Vice Chair and Chair for several years before rolling off in 2020. Similarly, I served on the City of Franklin stormwater committee that prepared the city's new stormwater ordinance over 15 years ago and served on the city's Stormwater Appeals Board for several years.

Please feel free to contact me with any questions and to discuss these comments.

Sincerely,



Dorie Bolze
President & CEO

Cc:

Jennifer Dodd, Director, Division of Water Resources

Comments on Proposed Draft Small MS4 General Permit

- Will the 303(d) list have layers labeled with the up-to-date language for waterbodies (unavailable, etc...) that are used in the Permit?
- Does roof runoff become contaminated if it crosses the parking lot?
- Does not mention size/area in 4.2.5.6. Development Project Plan Review, Approval, and Enforcement. Why?
- The draft permit seems to apply a “one size fits all” approach in that it prescribes BMPs, measurable goals, and reporting deliverables. This is significant divergence from past permits, which allowed permittees to craft their SWMP around their local stream impairments, citizen complaints, water quality priorities, and water quality goals. This approach does not recognize that inherent differences exist among local governments and their individual capabilities to determine and ensure which BMPs are effective. The Division should refrain from prescribing BMP descriptions and the types, numbers, and measurable goals for MCMs and instead focus on compliance minimums.
- The draft permit includes a considerable increase in the level and specificity of required documentation and reporting. Numerous procedures, processes, and plans are identified, as well as an annual solicitor’s certification, SWMP Evaluation Report, and the annual reporting deliverables identified in management measure tables. Some of these items seem unnecessary or redundant (detailed comments will follow). This increase in the level and specificity of required documentation and reporting will require substantially more permittee resources to implement and maintain at a time when permittees are resource-stressed already. The changes will force permittees to focus on getting paperwork done and keeping it updated each year rather than meaningful permit compliance and water quality protection. The Division should re-examine the level and

specificity of required documentation and reporting in the draft permit and seek ways to reduce the administrative burden on permittees. For most of the new sub-plans, reports, procedures, and annual reporting requirements in the draft permit, a deadline for implementation is not provided. Does this mean permittees are required to step-up administratively immediately when the permit becomes effective? Given the substantial increase in the documentation required by this permit and the potential need to secure additional staff or outside resources to prepare these items, permittees will need significant additional time to budget, plan, and prepare the new plans, reports, and procedures. This is especially true for the upgrade in compliance tracking required in the annual report. This change alone will require permittees to revisit current methods of compliance tracking, determine the changes needed to meet the new permit, coordinate with the departments affected, and allocate funding/resources required to upgrade. As well, the new permit could become effective near the beginning of a municipal fiscal year (July 2022) for many permittees. For these permittees, their FY22-23 budgets do not include funding to deal with such a substantial increase in the permit's administrative needs. As a result, at least three years from the effective date of the permit may be needed for permittees to budget, plan, and then implement the necessary changes.

- There are many different, overlapping compliance timeframes in the permit. Can TDEC put together a compliance timeline/checklist for permittees to follow to help avoid confusion?
- Throughout the permit, remove the words “all”, “any” and 100% as it is all-inclusive and suggests that missing any one element or partial element of the permit, no matter how small or insignificant, would put the permittee at risk for violation of the permit. Specifically, the phrase “100% of all” is used frequently in the “Measurable Goals” column of the permit compliance tables.

- Section 4.2.5.2.c., on page 33, notes “Uncontaminated roof runoff may be excluded from the WQTV.” This sentence should be removed from the permit. If included, the permit would allow designers of post-construction stormwater control measures to pretend that some portion, even the major portion, of the impervious surface area simply doesn’t produce runoff when it rains. In urban settings, no runoff from impervious surfaces, including roofs, is uncontaminated, much less permanently uncontaminated. Contaminants – solid and dissolved - come from a range of deposition sources like dust, pollen, the fallout from combustion, wildlife... as well as from weathering and decomposition of the roof itself. A Google search will bring up several confirming studies. If maintained, TDEC should provide in the rationale clear scientific evidence that roofs do not contribute detrimentally to runoff and do not deliver pollutants to streams/rivers.
- Section 4.2.5.4.b and c, on pages 36 and 37, explicitly allows infiltration-based stormwater control measures in the riparian buffer. It is well-accepted that the best control for postconstruction runoff is for it to infiltrate into suitable soil or media. Creekside stream buffer areas may be the worst location for infiltration-based stormwater control measures. First, the water table adjacent to a stream would likely prevent any meaningful infiltration, particularly during a storm event. Second, one of the keys to effective infiltration is to keep the infiltration area from getting blanketed with silt. High stormwater flows in buffer areas will surely deliver silt to these practices which will quickly render them ineffective. The permit should not speak to the allowance of these practices in riparian buffers and the local governments should have complete discretion regarding where infiltration-based stormwater practices may be placed.
- Section 3.1: This section states that TDEC may require an MS4 to create a Corrective Action Plan if stormwater discharges from the MS4 are determined to cause or contribute to an instream exceedance of water quality standards. The permit must include the criteria and methodology by which an MS4 can quantitatively determine if its

stormwater discharges contribute to an exceedance of the water quality standards that presently are defined only for in-stream water conditions. There are presently no promulgated standards in Tennessee regulating MS4 stormwater discharges for the parameters specified in this section (i.e. nutrients, pathogens, siltation).

- Section 3.1.1: This section requires the permittee to implement stormwater pollutant reductions consistent with any applicable Waste Load Allocations (WLA) in a TMDL. The permit must include the acceptable methodology by which an MS4 can quantitatively determine how an MS4's stormwater discharges would impact the in-stream pollutant levels to be reduced according to the WLA TMDL requirements. The WLA in TMDLs are specified only for in-stream concentrations and there are presently no promulgated standards in Tennessee regulating MS4 stormwater discharges for the parameters that could be the subject of a TMDL.
- Section 3.1.2: This section requires the permittee to implement stormwater pollutant reductions for waters with unavailable parameters that are not subject to a TMDL. The permit must include the acceptable methodology by which an MS4 can quantitatively determine if its MS4 stormwater discharges are significant (i.e. not de minimis) contributors to the impairment. Impairments are defined only for in-stream concentrations and there are presently no promulgated standards in Tennessee limiting MS4 stormwater discharges for possible unavailable parameters.
- Section 4.1.1, Pg 12. Implementation Plan - Submit implementation plan for permanent stormwater management program 90 days from the Effective Date on the Notice of Coverage. Please make it line up with when our annual reports are due so that we can put them through the same process as our annual report for a public meeting. – Recommendation is to say 90 days or when our annual report is due, whichever is later.
- Section 4.1.1, Pg 12. Implementation Plan – can the State provide a framework or outline of what is expected to be provided in such an implementation plan?

- Section 4.1.2, Pg 13 The table in this section notes the permit has 18 months to implement changes to regulatory mechanisms. However, the Table in Section 4.2.4, Page 30 gives a 12-month timeline for changes to regulatory mechanisms. This is inconsistent and should be corrected.
- Section 4.2.1 Public Education & Outreach. Holistic comment on this section. For multiple permit cycles, MS4s have implemented locally derived public education and outreach plans that have been compliant with the NPDES program. This permit is a significant leap forward in the prescriptive nature of the permit, defining very specifically numerous management measures and very specific (but arbitrary) numbers of activities. This approach will likely require a complete overhaul of local government outreach programs to ensure compliance with every single element of these sections. Is that TDECs intent? If not, can this section be structured such that local governments have more flexibility to continue implementing programs that already cover these management measures more broadly? TDEC still maintains the authority to review the PIE and make adjustments through audits to verify that the intent of the permit is being met without burdening all permittees with a very prescriptive list of requirements.
- Section 4.2.1 Public Education & Outreach. Can the State clarify the Measurable Goals in the tables of this section? The permit says “conduct and/or sponsor a minimum number of activities that address each of the issues identified under management measures...” It goes on to list the associated number of activities. Section 4.2.1.1 has 5 bullet points under “Management Measure.” Is a permittee with less than 25,000 (as an example) required to conduct 3 activities per management measure (thus, $3 \times 5 = 15$ activities), OR can they conduct 3 activities that include all 5 of the management measure topics? If the former example is desired, TDEC should consider the feasibility of such small MS4s having the resources and staff to conduct numerous activities. This

is only one of three categories in this section so the number of required activities would grow significantly.

- Section 4.2.1.1 What level of involvement distinguishes collaborating from sponsoring in an MCM1/MCM2 activity? Is a collaboration between 2 or more MS4's considered a sponsored event?
- Section 4.2.1 and 4.2.2 Related to Public Outreach and Public Involvement, can one event have multiple "activities" within it and thus achieve the requirements of both Public Education and Outreach and Public Involvement/ Participation as discussed in sections 4.2.1 & 4.2.2?
- Section 4.2.3, Page 24, d.: Please define "Significant" as it pertains to this section.
- Section 4.2.3 Page 25: Please elaborate on how to comply with the annual reporting requirements of "% of non-stormwater discharges or flow investigated as a significant contributor of pollutants to the MS4". What denominator is used to find this percentage? Also please define "significant" as it pertains to this section.
- Section 4.2.3 Illicit Discharge Detection and Elimination. Page 26. Multiple boxes in this Table speak to compliance in 100% of all circumstances. Based on the experience of implementing an IDDE program, a permittee may not always be able to determine the source and discharger for a confirmed illicit discharge. So, being able to initiate enforcement and/or receive corrective action plans for 100% of confirmed issues may not always be possible. The table should be modified to allow for exceptions when due diligence is performed so that the permittee does not have compliance liability if they can not readily identify a source or discharger.
- Section 4.2.5 Please add a definition for "Stormwater Control Measures (SCMs)", specifically covering how the term pertains to section 4.2.5 of the draft permit.

- Section 4.2.5.2, page 33, item b. Please clarify “information relevant” and “readily available” in the following statement: “Information relevant to identified SCMs should be made readily available.”
- Section 4.2.5.2, page 33, item b.: Please define “Significantly limit” as it pertains to the following statement: “If the permittee decides to significantly limit the number of SCM options it must be documented in the stormwater management program how the performance standards of Tennessee Rule 0400-40-10-.04 can be met with the limited set of control measures that are allowed.
- Section 4.2.5.6. TDEC should not be dictating the specific elements of the Plan Review and installation verification process, as the process is different across all communities and varies widely based on the size of the community, the resources/staff available, and the amount of development occurring, etc. The permit needs to only say “each MS4 must document the process for performing plan review and verification of appropriate installation.”
- Section 4.2.5.9, Page 42 - Establish a time frame for review of all plans and review 100% of all plans within that timeframe – I don’t know why TDEC should make MS4s set a timeframe for the plans review process for our communities. This is completely unnecessary and each MS4 should be able to decide how its process works. If a process is in place, then the MS4 is meeting the intent. What regulation gives TDEC the authority to regulate the time frame for local governments to perform plan reviews?
- Section 4.6.1.1.1 On Page 55 the draft states “Adopt existing survey protocols such as the ones available through the Natural Resources Conservation Service, State of Maryland Department of Natural Resources, and/or the State of Tennessee Habitat Assessment Protocol and related Stream Survey Field Sheets; or...”. Please provide references to the survey protocols listed here.

- Section 4.6.1.1.1 on page 55 the draft states that the permittee may Develop their own protocol which must address 14 Visual Survey Assessment elements: (Channel Condition, Hydrologic Alteration, Bank Condition, Riparian Area Condition, Canopy Cover, Water Appearance, Nutrient Enrichment, Animal Or Human Waste Presence, Pools, Barriers, Fish Habitat Complexity, Invertebrate Habitat, Invertebrate Community, Riffle Embeddedness, Other as defined by the permittee) Must all 14 elements listed above be assessed in each stream?
- Section 4.6.1.1.2 on page 56 please clarify the statement (item e.) “Utilize Division protocols identified above in Option 1 or protocols approved by the Division for instream monitoring.” Which protocols in option is TDEC referring to?
- Please clarify Section 4.6.1.1.2 on page 57 item h: “Provisions for an administratively continued small MS4 general permit.” If the MS4’s monitoring plan is for one permit cycle, could the provisions for an administratively continued permit be “ensure the monitoring is complete for the permit cycle”?
- Please provide a definition for “wet weather screening” as it pertains to section 4.6.2 item b. (Page 59).

May 23, 2022

Tennessee Department of Environment & Conservation (TDEC)

Attn: Ariel Wessel-Fuss

Environmental Protection Specialist

Division of Water Resources

711 R.S. Gass Blvd., Nashville, TN 37216

(615) 687-7119

Submitted Electronically to: Ariel.Wessel-Fuss@tn.gov

RE: Recommendations Related to MS4 Rules Implementation- Draft NPDES General Permit

Dear Ariel:

We thank you for this opportunity to provide public comment on the Draft TNS000000 Small MS4 General Permit. As stormwater management professionals, we are vested in seeing local water quality protected to the maximum extent practicable. We generally feel implementation of this permit will incentivize better overall site and stormwater control measure (SCM) design while protecting Tennessee waterways from additional pollution.

As TDEC completes the general permit development process, we would like you to consider several key recommendations. We feel expanded guidance, clarity, and/or regulatory flexibility around these specific areas will have a positive impact on the MS4 and development communities without compromising the robustness of the draft permit. Each recommendation or request for clarification is accompanied by the specific section where it can be found within the document.

4.2.5.2.c Permanent Stormwater Standards

- 1) Remove the allowance for "uncontaminated roof runoff" to be excluded from the calculated water quality treatment volume (WQTV).

Numerous scientific studies have shown rooftops to be polluted by atmospheric deposition and organic matter, as well as bacteria deposited by wildlife. Roof runoff is commonly impacted by harmful contaminants like heavy metals, polycyclic aromatic hydrocarbons (PAHs), microbes, pathogens, and pesticides. Allowing its exclusion from the WQTV will result in patchwork compliance strategies across the state and negative impacts to water quality.

- 2) Mandate specific and consistent infiltration testing requirements for infiltration based SCMs

For SCMs that rely primarily on infiltration, it is critical proper infiltration testing requirements be specified to ensure the selected SCM functions as intended upon installation. Soil suitability should be evaluated earlier in the design process. We request TDEC provide guidance in the form of a process document establishing standard soil investigation procedures and

requirements. Guidance from TDEC would be applied uniformly across the state and lead to higher performing SCMs.

- 3) Include a minimum soil infiltration rate for infiltration SCMs based upon the best available scientific literature.

The infiltration rate of in-situ soils is a determining factor for multiple SCMs to function as an infiltration or filtration practice. We recommend that TDEC stipulate that all infiltration SCMs designed without underdrains to be located within soils providing infiltration rates equal to or greater than 0.5 inches per hour.

- 4) Clarify within the Water Quality Treatment Volume Table that proprietary filtration and biofiltration manufactured treatment devices (MTDs) can be used to treat 1.0", 1.25", or 2.5" of water quality volume as those types of systems share similar pollutant removal processes with allowable non-proprietary SCMs.

With identified site challenges across the state, including limited subsoil infiltration rates, karst topography, and depth to bedrock, the broadest possible suite of solutions as determined by the best available science should be available for each level of water quality volume required to be treated. TDEC's public position is that each SCM type be classified by the treatment process it relies upon. This point was articulated by staff numerous times within the Response to Comment document prepared by the Department ahead of the Water Quality, Oil, & Gas Board meeting on April 20, 2021 and at other times during development of this draft permit. Proprietary Filtration and Biofiltration MTDs share pollutant removal processes with numerous non-proprietary SCMs. As such, they should be treated similarly and allowed for use in the first three (3) categories of treatment types. All other MTDs should remain in the 4th category as they do not share pollutant removal processes with the other listed types.

- 5) Specify that Filter and Biofiltration MTDs used to treat 1.0", 1.25", or 2.5" must be evaluated using the same industry wide standards required by 4.2.5.2d.

When used as stand-alone terminal treatment or in combination with storage or infiltration solutions, i.e., hybrid infrastructure, filter and biofiltration MTDs should be required to verify a minimum 80% total suspended solids reduction in accordance with industry standards. This will ensure installed practices meet the minimum required performance criteria established by this permit and reduce pollutants to the maximum extent practicable.

- 6) In 4.2.5.2.d.1, clarify the sequence of treatment trains utilizing MTDs to ensure different unit removal processes are used in series to meet permanent stormwater standards.

Without further clarification, it is likely MTDs with the same unit removal process, i.e. hydrodynamic separator (HDS) to HDS, will be utilized to meet permit requirements. This is not

supported by best available science and will not assist in improving water quality. Designing with distinct unit removal processes in mind will ensure pollutants are reduced to maximum extent practicable when utilizing treatment trains featuring MTDs. The most common way of demonstrating this idea is to place the less effective practice upstream of the more effective practice, i.e. HDS upstream of a filter.

- 7) In 4.2.5.2.d.1, define what constitutes “industry wide standards” for proprietary practices and “published reference literature” for non-proprietary SCMs.

Without a definition, there is very little to distinguish between a company publishing information on their website and data published in a peer reviewed study. TDEC should be explicit with the Agency’s expectations of accepted SCM evaluation programs and monitoring requirements to ensure pollutants are reduced to maximum extent practicable. It would helpful if TDEC could provide references to guide design professionals and permittees as to where this information can be found.

Section 4.2.5.4 Water Quality Riparian Buffers

- 8) Remove the allowance for infiltration based SCMs to be allowed within remaining riparian buffers.

Infiltration practices within the buffer will be subject to significant inundation during periods of wet weather. The underlying soils will often be unsuitable for effective infiltration. Access for maintenance could also be challenging. For these reasons, infiltration based SCMs should not be allowed within riparian buffers.

Thank you in advance for considering these comments. We look forward to working with TDEC in the future on other critical water quality initiatives. Please contact us with any questions concerning this submittal.

Sincerely,



Jacob Dorman
Regional Regulatory Manager
Central and East Tennessee
Contech Engineered Solutions LLC
757.374.4321
Jacob.Dorman@ContechES.com



Chris Allen
Regional Regulatory Manager
West Tennessee
Contech Engineered Solutions LLC
614.531.9420
Chris.Allen@ContechES.com

May 23, 2022

Ariel Wessel-Fuss
TDEC Division of Water Resources
711 R.S. Gass Blvd.
Nashville, TN 37216
(615) 532-0642

[Submitted Electronically to: Ariel.Wessel-Fuss@tn.gov](mailto:Ariel.Wessel-Fuss@tn.gov)

Re: Comments from TNSA SCM Committee for NPDES Phase II Permit

Dear Ariel,

Thank you for the opportunity to provide public comment on the Draft TNS000000 Small MS4 General Permit. As stormwater management professionals serving on the SCM Committee for TNSA, we are vested in seeing local water quality protected to the maximum extent practicable. In this letter, we have provided several recommendations for the draft permit. The SCM Committee feels expanded guidance and clarity will have a positive impact on MS4 and development communities across Tennessee.

Each recommendation or request for clarification listed below is accompanied by the specific section from where it is referenced in the TNS000000 Small MS4 General Permit.

[4.2.5.2.b. Permanent Stormwater Standards](#)

1. We recommend this statement be included: "All infiltration SCMs designed without underdrains must be located within soils providing infiltration rates equal to or greater than 0.5 inches per hour. Any in-situ soils with infiltration rates less than 0.5 inches per hour require underdrains for the SCM."
 - The infiltration rate of existing soils is a determining factor in whether multiple SCMs (including bioretention, and permeable pavement) can function as infiltration devices or filtration devices. The SCM Committee feels it is important that TDEC provide guidance on how to determine if a SCM can function as an infiltration device since that is a critical measure of assigning the WQTV.
2. We recommend TDEC expand this section to include infiltration testing requirements for infiltration-based SCMs.

- For green stormwater infrastructure (GSI) that primarily relies on infiltration, it is critical that proper infiltration testing requirements be specified to ensure the selected SCM functions as intended upon installation.
- TDEC should include standard soil investigation procedures and requirements. This would provide universal guidance across the state and lead to higher performing SCMs.

4.2.5.2.c. Permanent Stormwater Standards

1. The permit currently states, "Uncontaminated roof runoff may be excluded from the WQTV." As professionals in the stormwater community, we disagree with this statement and recommend it be removed from the permit.
 - Studies have demonstrated that rooftop runoff is not the same as potable water and rooftop runoff is polluted through atmospheric deposition and organic matter, as well as bacteria deposited by wildlife. Roof runoff is commonly impacted by harmful contaminants like heavy metals, polycyclic aromatic hydrocarbons (PAHs), microbes, pathogens, and pesticides. Nowhere else in the permit is uncontaminated roof runoff mentioned, nor is it characterized as an allowable non-stormwater discharge.
 - Rooftop surface area is typically a significant percentage of site development on properties and the SCM Committee believes surface area of a rooftop should be given the same weight as other impervious surfaces on the site when calculating the WQTV. This should be universal across the state of Tennessee.
 - As the permit language is currently written, MS4 permittees will inconsistently apply their own standards and result in patchwork compliance strategies across Tennessee.
2. Within the table titled "Water Quality Treatment Volume and the Corresponding SCM Treatment Type for the 1-year, 24-hour design storm," TDEC should include additional examples and guidance on more SCMs because many have design-specific nuances that differentiate the function of the SCM between filtration or infiltration. TDEC provided specific guidance on how to achieve biologically active filtration and we request similar guidance on additional SCMs included below.
 - a. Change "permeable pavers" to "permeable pavement" so the term includes various different types of permeable pavement including permeable interlocking concrete pavers (PICP), permeable asphalt, permeable concrete, etc.
 - b. Within the SCM Treatment Type for "infiltration, evaporation, transpiration, and/or reuse", please include the following notes:

- i. Specify “Any in-situ soils with infiltration rates less than 0.5 inches per hour require underdrains for the SCMs. Any SCMs installed with impermeable liners in the soil profile are not considered infiltration practices.”
 - ii. Include “permeable pavement without underdrains” in this category as an example.
 - iii. Remove “stormwater wetlands” as an example in this category. Stormwater wetlands function more similarly to detention ponds rather than infiltration systems.
- c. Within the SCM Treatment Type for “sand or gravel filtration, settling ponds, extended detention ponds, and wet ponds”, please include the following revision:
 - i. Change the “permeable pavers” example to be listed as “permeable pavement with underdrains.”
 - ii. Add “stormwater wetlands” as an example in this category.
 - iii. Include “stormwater wetlands” in the requirement that says forebays must be 10% of the total design volume.
 - iv. Specify “Any SCMs installed with impermeable liners in the soil profile are considered filtration practices.”
- d. Within the SCM Treatment Type for “sand or gravel filtration, settling ponds, extended detention ponds, and wet ponds” please include a definition for “regional detention ponds.”
- e. Include this statement: “Filter and Biofiltration MTDs can share pollutant removal processes with treatment types in tiers eligible to treat 1 inch, 1.25 inch, and 2.5 inch water quality treatment volumes. As such, these practices should be allowed as stand-alone practices or in combination with other storage/infiltration solutions if they meet a minimum 80% TSS reduction. TSS removal rates for these practices must be evaluated using industry wide standards identified by TDEC.

4.2.5.2.d.1. Treatment Trains Using MTDs

1. Designers should be instructed on how to sequence multiple devices so a HDS is not in direct sequence with another HDS. TDEC should specify that the more effective device is to be placed downstream from the less effective device. This ensures pollutants are reduced to the maximum extent practicable when utilizing treatment trains featuring MTDs.
 - a. Include this statement, “The designed sequence of treatment trains utilizing MTDs must ensure different removal processes are used in series to meet permanent stormwater standards. When comparing pollutant removal effectiveness within

devices in the treatment train sequence, SCMs with less effective pollutant removal processes shall be located earlier in the sequence and SCMs with higher pollutant removal effectiveness shall be placed further downstream in the sequence.”

2. A definition for “published reference literature” should be included. Without a definition, there is no way to distinguish between a company publishing information on their website and data published in a peer reviewed study.

4.2.5.2.d.2. Treatment Trains Not Using MTDs

1. The treated WQTV of upstream SCMs should only be removed if the treated volume is separated from the untreated volume (e.g. infiltration). If the treated WQTV flows into the next SCM in the treatment train, the designer should use a formula similar to the one shown in 4.2.5.2.d.1.

Thank you for considering these comments. The SCM Committee looks forward to working with TDEC in the future on other critical water quality initiatives.

Please contact me with any questions or if you would like to further discuss these comments on the TNS000000 Small MS4 General Permit.

Sincerely,



Jacob Dorman
Chair, TNSA SCM Committee
Jacob.Dorman@Conteches.com
(757) 374-4321

On behalf of TNSA Committee Members: Crystal Bishop, Roger Fields, Joshua Frerichs, Chris Granju, Don Green, Amy Hathaway, Dr. Jon Hathaway, Mark Miller, Van Oldham, Amanda Purkey, Janette Wolf

CC: Charlene DeSha, TNSA Executive Director



HISTORIC
FRANKLIN
TENNESSEE

Ariel Wessel-Fuss
Tennessee Department of Environment and Conservation
711 R.S. Gass Blvd
Nashville, TN 37216

RE: Draft MS4 Permit Comments

Mrs. Wessel-Fuss,

The City of Franklin appreciates the opportunity to submit comments on the 2022 draft MS4 permit. Please see our comments below.

1. 4.2.5.2 Permanent Stormwater Standards. There shall be language inserted into the permit that states the MS4 shall be considered in compliance with this section if they have already developed and implemented a permanent Stormwater Standard that meets the conditions of the previous permit, still meets MEP and has been approved by TDEC through an audit or written correspondence.
2. 4.2.5.2.c Uncontaminated roof runoff shall be defined. For example: Contaminated roof runoff shall be runoff from a roof made of a material that has or may have the potential to create polluted runoff such as asphalt shingles, galvanized roofing, tar roofing, painted roofing, etc. Uncontaminated roof runoff shall be runoff in which the roof is comprised of bioengineering materials such as a green roof. Otherwise, this places an undue burden on the MS4 of trying to determine what Uncontaminated roof runoff is on every development project.
3. 4.2.5.4. Water Quality Riparian Buffers. It shall be defined what infiltrative SCMs are allowed. As this reads someone could install a pervious parking lot in a riparian buffer. These will clog and become impervious as fines from flood events deposit. Even bioretention practices have tendencies to incur a layer of siltation that reduces infiltrative capacities in these areas. This then places an undue burden on the landowners to maintain and the MS4 staff to inspect. We have areas we can take TDEC permit writers to demonstrate this. The pervious concrete parking lot at Eastern Flank Battlefield canoe launch is one excellent example. This area has been silted in over numerous times and cleaned numerous times. At the last cleaning it was determined no more cleaning of the area would be performed as cleaning was not successful at restoring infiltrative capacities.
4. 4.2.5.4.e. Most surveyors consider top of bank as the “break in slope” which is different than the ordinary high-water mark. Ordinary high-water mark is typically determined by visual observations in the field of wrack lines, scouring, etc.
5. 4.2.5.6.c In our opinion this places an unreasonable burden on the MS4 and site contractors. The construction process is a very fluid process and subsequently incurs phasing, reinstallation of features, utility conflicts, etc during the construction process that stretches over years. In many instances on large residential and commercial sites (we have had up to 20 bioretention areas on a site before) these will be



built as drainage basins are stabilized. As written, this would require the MS4, contractor or engineer to visit the site every time a SCM is finished. In some instances, the same SCM could be required to be inspected multiple times. The documentation process for the MS4 alone would be a large burden as ultimately the MS4 would have to create an inspection process for just the completion of SCM's to ensure the contractor is calling us every time one is done. This shall be changed to state once the site or project is completed as defined by the MS4 (Bond release, site stabilization, Certificate of Occupancy, Notice of Termination, etc). Then the entire site can be inspected at once when construction for the project has finished.

6. NPDES Permit Referrals. It is our opinion that the MS4 shall NOT be responsible for determining whether a TDEC permitted facility is in compliance with their TDEC issued permit. If a TDEC permit allows a particular discharge to be permitted, then TDEC shall be the responsible party for determining whether that discharge and/or facility is in compliance with their TDEC permit. The only responsibility of the MS4 shall be the reporting or "referral" to TDEC that a potential discharge and violation has occurred. TDEC shall then be responsible for any enforcement actions against the facility resulting from permit non-compliance actions or activities due to this. As conveyed by our legal staff this can be considered overreach by the MS4 and the City does not intend to insert itself into these determinations or enforcement actions.

This particularly applies to Industrial facility permits. If our MS4 permit does not authorize the coverage (1.4.b Limitation on coverage) then MS4 staff shall not be required to determine what is authorized by an industrial permit. MS4 staff shall be familiar with their MS4 permit, and not with another sectors NPDES permit and it's permitted discharges.

7. Stormwater Control Measures (SCM). This shall be defined.
8. Other. The permit shall define how the MS4 shall handle agricultural projects and if they are exempt from the coverage and associated provisions of the permit. In particular post construction water quality treatment and riparian buffer requirements.

Respectfully submitted,

Jeff Willoughby
Stormwater Management Coordinator



City of Chattanooga

Department of Public Works

Stormwater Division

Development Resource Center

1250 Market Street, Suite 2100, Chattanooga, Tennessee 37402-2713

(423) 643-5877 Fax (423) 643-5862

Tennessee Department of Environment and Conservation
Division of Water Resources
Attention: Ariel Wessel-Fuss

RE: Draft NPDES Phase II Comments

Dear Ms. Wessel-Fuss:

Please accept the following attached comments to the draft Phase II small MS4 permit on behalf of City of Chattanooga Stormwater Division.

Sincerely,

A handwritten signature in blue ink, appearing to read "Mounir Minkara", is written over a horizontal line.

Mounir Minkara, Ph.D., P.E., CPSWQ
Water Quality Manager

cc: William C. Payne, P.E., Chattanooga City Engineer
Vojin Janic, TDEC – Division of Water Resources

City of Chattanooga
Comments to Draft NPDES Phase II Permit

Section 4.2.1 - Public Education & Outreach

- Define “activity” as it refers to public education and outreach, as well as public involvement. Is there a minimum number of people that need to be reached at each event? How does social media help meet these goals?
- Giving a specific number of activities to be conducted can be a good goal, but it must be flexible based on the community’s makeup (e.g., rural vs urban).
 - For a community of greater than 50k, it reads as if the community would need to do the following number of events:
 - Public: 9×5 (a,b,c,d,e) = 9-45 activities
 - These management measures address different audiences so it would be difficult to hit all of them with one event, so the MS4 will be on the higher end for number of events.
 - Engineering: 6×2 (a,b) = 6-12 activities (likely just 6 because of the similarity in audience being able to be gathered together)
 - Employees: all relevant employees once per year for the 3 (a,b,c) management measures identified. This is doable.

Sections 4.2.4.h and j - priority and non priority sites

- 100% of all non-priority sites should be inspected quarterly at a minimum, as opposed to the suggested 10% just annually. An MS4 will potentially miss multiple issues. For reference, in Chattanooga, 90% of the land disturbing permits that are issued are considered non-priority.
- Priority sites are defined as “those construction activities discharging directly into, or immediately upstream of, waters the state recognized as unavailable condition for siltation or Exceptional Tennessee Waters.”
 - Please define “directly into” and “immediately upstream”. Is this 10’, 1000’, etc.
 - Steps to identify priority sites should include the nature of the construction activity, topography, and the characteristics of soils and receiving water quality.

Section 4.2.4.j - comments on the table

- “Establish policies and/or procedures for review and approval of all plans and review 100% of all projects accordingly.”
 - What happens if you don’t approve a set of plans? TDEC understands that not all plans will get approved, so this needs to be worded differently.
- “Mechanisms or plans for public access to information on projects and receiving and considering comments from the public on those projects.”
 - What do you mean by “consider comments”? How long does someone have to submit a comment? Does FOIA and TORA not suffice?

Sec 4.2.5.2 Permanent Stormwater Standards

- Bullet a: In some instances, retrofit projects should have the same compliance standards as new developments and redevelopment projects, especially if they are associated with mitigation projects (4.2.5.3). This is briefly mentioned in 4.2.5.7.a

City of Chattanooga
Comments to Draft NPDES Phase II Permit

- Bullet c: Uncontaminated roof runoff must be defined. There may be less contamination on a roof than on a parking lot, but there is not zero contamination, especially when considering the impacts of thermal pollution. TDEC's response to comments during the rulemaking states that green roofs can be removed from the WQTV since they would not be considered impervious while at the same time stating that any "uncontaminated" roof area can be removed from the WQTV. This is not consistent unless TDEC is stating that only runoff from a green roof is considered uncontaminated.
 - TDEC response to comment 103: While green roofs and open space preservation do not typically receive runoff from an impervious surface, their inclusion in site design reduces the overall impervious surface and as such reduces the total WQTV required to be treated. Any green space receiving runoff intended for infiltration may be part of a treatment train for part or WQTV it infiltrates.
- Bullet f: TDEC has stated (response to comment 81 in rulemaking) that "the incentive for vertical density is based on the water quality benefits of retaining greenspace, not TSS removal." If this is the case, then the permit must require retained green space as part of the vertical density incentive.

Sec 4.2.5.3 Stormwater Mitigation & Public Stormwater Fund

- Offsite mitigation and In-Lieu-Fee projects need to be given a maximum amount of time before construction completion, so as not to allow years to go by with unmitigated projects.
- Provide guidance on how to determine what the in-lieu-fee amount should be. The cost can be very high when considering administration, land acquisition, design, and O&M.

Sec 4.2.5.4 Water Quality Riparian Buffers

- Instead of saying "streams, including wetlands, ponds, and lakes", just say Waters of the State.
- Bullet b (table): Incorporate all 303d list parameters, not just siltation and habitat alteration, when considering buffer widths
- Bullets b & c: The permit should not allow infiltration based SCMs in the buffer.
 - Infiltration based SCMs are not always vegetated; they can be bioretention with good native plants, but they could also just be open gravel beds or even stormchamber systems with a parking lot on top.
 - This creates a higher likelihood of choking out the system with silt/debris due to the placement of these SCMs under or near dense canopy and in flood prone areas where streamflows deposit sediment.
 - If this stays in the permit, then it should be made clear that these SCMs do not count towards the buffer area. There will need to be averaging onsite or either offsite mitigation for lost buffer due to the SCM placement.
- Bullet e: OHWM and TOB are not always the same. Say top of bank or flow line generated from the 2 year storm event

City of Chattanooga
Comments to Draft NPDES Phase II Permit

Sec 4.2.5.6 Development Project Plan Review

- Bullet b: requiring the approval of a maintenance plan at the review phase is good
- Bullet c: Submission of the as-built and verification of the same should be required before the permit is closed and the permittee receives their certificate of occupancy

Sec 4.2.5.7 Maintenance of Permanent SCM Assets

- Bullet b.1: Define “other qualified professionals” who are “familiar” with SCMs. If someone besides the MS4 staff or an LA or PE is doing the inspections, then there needs to be some form of certification, not just familiarity.

Sec 4.2.5.8 Inventory and Tracking

- Easily referenced documents are good to require, but having them available to the public can be more difficult. Members of the public are always able to submit a TORA request. Does this count?
- What is the record retention time for these documents? Can each MS4s policy determine this?

Sec 4.5.4 is good

- Requirements for Chronic Violators is a good section.
 - The last sentence should be rewritten to say... “If corrective actions are not taken, the permittee shall pursue progressive enforcement and, if need be, *to protect the public health, safety, and welfare and prevent further damages to waters*, the permittee shall perform the necessary work and assess against the owner/operator the costs incurred for repairs.”

In General:

- Need consistent use of “stormwater” or “storm water”
- The permittee refers to both SCMs and BMPs. Define the difference or be consistent with just one.
- The implementation timelines seem hard to implement. It took Chattanooga 2 years to complete the EPA scorecard and begin making some ordinance changes. It took us nearly a whole permit cycle to implement the runoff reduction standard.



ENGINEERING - STORMWATER

CLEAN WATER | HEALTHY COMMUNITIES

132 W. Main St Gallatin, TN 37066 | GallatinTN.gov/Stormwater | 615-451-5965

May 20, 2022

Tennessee Department of Environment and Conservation, Division of Water Resources

Attention: Ariel Wessel-Fuss

312 Rosa L. Parks Avenue, 11th Floor

Nashville, Tennessee 37243

Dear Ms. Wessel-Fuss,

This letter provides comments and questions to the draft State of Tennessee NPDES small Municipal Separate Storm System (MS4) Permit (draft permit) published on March 22, 2022. These comments are submitted on behalf of the City of Gallatin, TN (City) and its stormwater program. Please note that the City may submit additional comments from those provided in this letter.

Thank you in advance, for your time and consideration of these comments. It is our understanding that a great deal of time and effort went into the restructuring of the permit and we are grateful for TDEC's dedication to this program and its compliance.

Very respectfully,

Kourtney Crutcher, Stormwater Coordinator

City of Gallatin

Kourtney.Crutcher@GallatinTN.gov

Lance Wagner, Stormwater Utility Manager

City of Gallatin

Lance.Wagner@GallatinTN.gov

CC: Paige Brown, Mayor; Nick Tuttle, City Engineer

NPDES Draft Permit Comments – City of Gallatin – Kourtney Crutcher and Lance Wagner
5/20/2022

NPDES Draft Permit: – Public Meeting April 26, 2022, 5-6pm question and answer & 6-7 pm formal meeting

Written comments are extended until May 23rd.

Comments for Public Hearing:

General Comments

1. Some of the deadlines for various documents and notices imposed on the small MS4's is confusing and separated throughout the document. The City requests clarity and for deadlines to be listed in one place, like a table.
2. Likewise, to the previous comment, it would be so helpful if changes directly related to new documentation requirements would also be presented in a table format ("cheat sheet").

Specific Comments

I. Part: 4.2.5.4.b and c

Location: Pages 36-37; 73

Comment: The allowance of infiltration-based stormwater control measures within the stormwater buffer directly interferes with the intent of the stormwater buffer. As defined on page 73 of the draft permit, the stormwater buffers purpose is "...to maintain the existing water quality by *minimizing* risk of any potential sediments, nutrients or other pollutants reaching adjacent surface waters *and* to further prevent negative water quality impacts by *providing canopy* over adjacent waters." The water table is especially high in these low-lying areas adjacent to streams and flooding is imminent during a rain event because of this. Because the water table is high in these areas, infiltration-based stormwater control measures functionality would be diminished entirely in a buffer. Furthermore, the averaging of such buffers would impede on the protection of canopy coverage.

The definition for buffers does not distinguish whether or not native vegetation should be reestablished or if it's permissible to allow any vegetation (native or otherwise invasive) be allowed to take root in the buffers. We request that this be clarified.

Buffers should be considered permanent SCM's and distinguished as such on PLAT's. There is a disconnect in what is required of MS4's on the annual reports related to buffers and what is required of the permittee. Instead, it should be made clear that buffers are permanent SCM's, required to be recorded on the PLAT

and treated with the same level of care as a detention pond or bio pond. For these reasons' buffers should not be averaged.

II. **Part:** 8 Definitions - Clearing

Location: Page 73

Comment: The definition for “clearing” should be re-evaluated. It appears the definition of grubbing has been substituted for clearing. This is confusing. This is especially important because in the new CGP, clearing is considered a land disturbing activity.

I. **Part:** 4.2.5.2.c.

Location: Page 33

II. **Comment:** Where roof water is mentioned on page 33, the word “uncontaminated” should be removed. Run-off from all impervious surfaces should be treated for the removal of pollutants to the “maximum extent practicable.” Roof water as an exception undermines the authority of MS4’s and violates EPA rules.



Wood Environment & Infrastructure Solutions, Inc.
2030 Falling Waters Road, Suite 300
Knoxville TN 37922
T: 865-671-6774
www.woodplc.com

May 23, 2022

Tennessee Department of Environment and Conservation, Division of Water Resources
Attention: Ariel Wessel-Fuss
312 Rosa L. Parks Avenue, 11th Floor
Nashville, Tennessee 37243

Dear Ms. Wessel-Fuss,

This letter provides comments to the draft State of Tennessee NPDES small Municipal Separate Storm Sewer System (MS4) Permit (draft permit) published on March 22, 2022. These comments are submitted by the following MS4 permittees: **City of Johnson City TN; City of Bristol TN; and City of Elizabethton TN**. Note that one or more of these permittees may submit additional comments separate from the group comments provided in this letter. Contact information for each permittee is provided below.

Andrew Best PE Assistant Director of Public Works, City of Johnson City TN	(423) 975-2700 abest@johnsoncitytn.org
Jacob Chandler PE Director of Engineering, City of Bristol TN	(423) 989-5585 jchandler@bristoltn.org
Logan M. Engle Director, Planning & Economic Development City of Elizabethton TN	(423) 542-1502 lengle@cityofelizabethton.org

Wood Environmental & Infrastructure Solutions, Inc. (Wood) was authorized by the permittees to prepare and provide these comments to you on their behalf. Any questions you may have regarding these comments can be directed to me (contact information below).

Kind regards,

Mary Halley
Project Manager, Wood Environmental and Infrastructure Solutions, Inc.
mobile: (865) 414-0642
email: mary.halley@woodplc.com

Cc: Andrew Best PE, City of Johnson City TN
Jacob Chandler PE, City of Bristol TN
Logan Engle, City of Elizabethton TN

Item 1.

General Comment: Comments are as follows.

- The draft permit seems to apply a “one size fits all” approach in that it prescribes BMPs, measurable goals, and reporting deliverables. This is a significant divergence from past permits, which allowed permittees to craft their SWMP around their local stream impairments, citizen complaints, water quality priorities, and water quality goals. This approach does not recognize that inherent differences exist among local governments and their individual capabilities to determine and ensure which BMPs are effective. **The Division should refrain from prescribing BMP descriptions and the types, number, and measurable goals for MCMs and instead focus on compliance minimums.**
- The draft permit includes a considerable increase in the level and specificity of required documentation and reporting. Numerous procedures, processes, and plans are identified, as well as an annual solicitor’s certification, SWMP Evaluation Report, and the annual reporting deliverables identified in management measure tables. Some of these items seem unnecessary or redundant (detailed comments will follow). This increase in the level and specificity of required documentation and reporting will require substantially more permittee resources to implement and maintain at a time when permittees are resource-stressed already. The changes will force permittees to focus on getting paperwork done and keeping it updated each year rather than meaningful permit compliance and water quality protection. **The Division should re-examine the level and specificity of required documentation and reporting in the draft permit and seek ways to reduce the administrative burden on permittees.** Additional, more detailed comments will follow on this subject.
- For most of the new sub-plans, reports, procedures, and annual reporting requirements in the draft permit, a deadline for implementation is not provided. Does this mean permittees are required to step-up administratively immediately when the permit becomes effective? Given the substantial increase in documentation required by this permit and the potential need to secure additional staff or outside resources to prepare these items, permittees will need significant additional time to budget, plan, and prepare the new plans, reports, and procedures. This is especially true for the upgrade in compliance tracking required in the annual report. This change alone will require permittees to revisit current methods of compliance tracking, determine the changes needed to meet the new permit, coordinate with the departments affected, and allocate funding/resources required to upgrade.

As well, the new permit could become effective near the beginning of a municipal fiscal year (July 2022) for many permittees. For these permittees, their FY22-23 budgets do not include funding to deal with such a substantial increase in the permit’s administrative needs. As a result, at least three years from the effective date of the permit may be needed for permittees to budget, plan, and then implement the necessary changes.
- **Should the high level of documentation and reporting remain in the final permit, the Division must provide clear deadlines for preparation of each of the written components should be provided.** Additional, more detailed comments will follow on this subject. **Additionally, the permit should gradually increase annual reporting requirements, allowing permittees time to plan, adjust, and implement new permit compliance tracking methods.**

Item 2.

General Comment: Part 5 of the Rationale is clear that acronym “SWMP” now means Stormwater Management Program in this permit. However, there are numerous statements pertaining to documentation in the SWMP or in the program that imply there are additional written elements required by the Division beyond the NOI and annual reports previously required. It is not always clear when something is required as a written element, and when it is

not. The explanation of a SWMP in the rationale (i.e., the 3-ring binder sitting on a file cabinet) does not clarify the Division's expectations. Examples of confusing statements relevant to the SWMP are provided below.

- **3.1.2 Discharges to Waterbodies with Unavailable Parameters**, 1st sentence, specifically the phrase and bolded words “the permittee must document in its SWMP how the BMPs will address the discharge of these pollutants”. While the remainder of the paragraph goes on to state that compliance with the requirement is demonstrated through monitoring, it is unclear how monitoring once every permit period demonstrates how BMPs address pollutants. Are monitoring results alone sufficient or must permittees extrapolate conclusions from monitoring results as they relate to BMP effectiveness? It is suggested the permit clearly identify how the permittees must “document in their SWMP how” or that the sentence be revised to something like “the permittee’s SWMP must address the discharge of these pollutants”.
- **4.1 Requirements**, 1st paragraph, 3rd sentence “The elements of the Program must be documented by the permittee in a Storm Water Management Program”. The sentence does not make sense (i.e., documenting program elements in a program). Since a written stormwater management plan does not seem to be required, the Division needs to identify how (or in what ways) the permittee must document in writing elements of the program. It is suggested that it may be more appropriate to say the elements of the Program must be documented in the permittee’s NOI, annual reports, and other compliance tracking or reporting tools or documents used by the permittee and kept on file.
- **4.1 Requirements**, 3rd paragraph “The SWMP must include the following information **documented in a plan** for each of the program elements ...”. The text in bold is confusing if a written plan is not required.

Item 3.

Part: 4.1 Requirements

Location: page 11, 1st paragraph, 4th sentence “... in accordance with subpart 4.4 and in conjunction with the requirements found in various sections throughout this permit”

Comment: Please replace “the requirements found in various sections throughout this permit” with specification of the permit parts where these requirements are found so it is clear the requirements to which this section refers.

Item 4.

Part: 4.1 Requirements

Location: page 11, list items b and c

Comments: Within this permit, the Division has already written the BMPs and measurable goals explicitly. That those items are to remain, this information should be pre-set in the permittee’s NOI to reduce the permit’s administrative burden on permittees.

Additionally, the draft permit includes requirements for documentation/reporting of most or all of this same information multiple times, in annual reports, the SWMP Evaluation Report, and other required sub-plans (PIE Plan, publicity plan, etc.). The Division should re-examine and eliminate redundant reporting elements to reduce the permit’s administrative burden on permittees.

Item 5.

Part: 4.1.1 Newly Permitted MS4 Jurisdictions

Location: page 12, 1st sentence

Comment: Newly permitted MS4 jurisdictions should have the entire five-year permit period to fully implement a SWMP. Effective MS4 permit compliance requires ample forethought and a corresponding change in municipal resources. Two years is not enough time when one considers the time it takes to educate municipal staff and

elected officials, create, and agree on a viable plan for compliance and its financial implications to the permittee, and then secure staff/resources to implement a full suite of compliance activities.

Item 6.

Part: 4.1.2 Previously Permitted MS4 Jurisdictions

Location: page 13, 1st and 2nd rows of the table

Comment: These rows are in conflict. Row 1 indicates “all updates” required by the permit must be done soon as possible but no later than 24 months, while row 2 says it must be 18 months for the construction site runoff program. It is suggested that row 2 be deleted or revised and that ordinance/regulatory mechanism revision deadlines be aligned with the deadline for ordinance changes required for the permanent stormwater legal authority (i.e., not to exceed 24 months from the permit effective date). This would eliminate the possibility that some permittees will have to put their ordinances before their elected body twice (i.e., once for construction site runoff changes and again for permanent stormwater management changes) or more often. To elected leaders, minimum control measures 4 and 5 seem very much like the same thing even when they are informed otherwise. Thus, requesting multiple city council actions for what they believe is “the same thing” can strain relationships and trust between municipal staff and elected leaders.

Item 7.

Part: 4.2.1 Public Education and Outreach on Storm Water Impacts; and 4.2.2 Public Involvement/Participation

Location: page 14, 2nd paragraph, regarding the PIE Plan; and Page 18, list item e, regarding the publicity plan

Comment: Please clarify if the PIE Plan and publicity plans should be a written documents. If so, please provide a clear deadline for preparing these plans.

Additionally, given the increase in required activities for these two minimum control measures and the additional documentation and tracking required for each, permittees should be given at least two permit years to identify, budget, and begin implementation for new/additional PIE and publicity activities. As a result, PIE and publicity plans should not be required until Permit Year 2 at the earliest, with activity implementation under both minimum control measures graduated over the full five-year permit period.

Item 8.

Parts: 4.2.1 Public Education and Outreach on Storm Water Impacts; 4.2.2 Public Involvement/Participation

Location: Pages 14 through 22, all sections of 4.2.1 and 4.2.2

Comment: It is strongly suggested that the permit target improvements in public education and public involvement activity selection and effectiveness rather than requiring arbitrary increases in the number of activities based on population. As written, the permit is unnecessarily burdensome and lacking focus on the goal of water quality protection.

The minimum number of annual activities conducted in the draft permit is considerably excessive for permittees that have populations of 25,000 and higher. The control measures emphasize the number of activities performed over the quality and effectiveness of any activities. However, more activities do not necessarily equate to effective programs. How did the Division derive these numbers?

If the draft permit stands as written, permittees that can and do provide effective public education, outreach, and involvement with fewer activities than that required by the permit will need more staff/funding resources simply to achieve the permit’s minimums. To what end is this necessary?

Finally, adding considerably more activities will require more staff and/or financial resources, neither of which can be secured quickly in a local government setting. If the draft permit is not modified in keeping with the comment

above, then permittees should be allowed to gradually increase the number of activities they perform each year, over the full five-year permit period.

Item 9.

Parts: 4.2.1 Public Education and Outreach on Storm Water Impacts; 4.2.2 Public Involvement/Participation

Location: Pages 14 through 22, all sections of 4.2.1 and 4.2.2

Comment: What constitutes an “activity” and how are activities measured? For example, is having/using a social media account for stormwater education considered a single activity or can each post (or series of posts) on a different topic considered a single activity?

Item 10.

Part: 4.2.2 Public Involvement/Participation

Location: Pages 18 through 22

Comment: This entire section is confusing. The list of elements a through i on page 18 does not seem to directly correspond to the management measures table on pages 19 and 20. Further these two permit elements do not seem to correspond well with the additional management measures tables on pages 21 and 22. Some requirements seem stated more than once, but in somewhat different ways making it difficult to clearly understand if these are separate requirements or the same. Suggest revising the control measure to the format used for the Public Education MCM, where the PIE plan provided the required activities, and the management measures tables outlined the activity minimums and reporting requirements.

Item 11.

Part: 4.2.1.1 and 4.2.2.1 General Public

Location: Pages 14 through 22, 1st paragraph in both subparts

Comment: For both the public education and public involvement/participation control measures, the permit identifies the public as the target audience in subsections 4.2.1 and 4.2.2.1, and then further categorizes sub-audiences under each subsection. It is unclear whether these sub-audiences are required targets or just suggested targets. Please clarify the required targets for both the public education and public involvement/participation activities. Suggested audiences should be moved to the rationale so Division staff don’t inadvertently include them as requirements during audits.

Item 12.

Part: 4.2.2.1 General Public and 4.2.2.2 Commercial and Development Community

Location: Pages 14 through 22

Comment: Are the management measures indicated in these parts in addition to the management measures identified in the table on pages 18 and 19? If so, indicate this clearly.

Item 13.

Part: 4.2.2 Public Involvement/Participation

Location: Entire section

Comment: Is a social media (e.g., Twitter or Instagram) activity considered public involvement/participation? Input from the public can be provided via responses to tweets and posts.

Item 14.**Part:** 4.2.3 Illicit Discharge Detection and Elimination**Location:** Page 23, list item a**Comment:** Please provide correct sub-part number.**Item 15.****Part:** 4.2.3 Illicit Discharge Detection and Elimination**Location:** Page 23, list item c**Comment:** Please indicate if these procedures must be in the form of a written document. If so, please provide a clear deadline for preparing this plan. Given the increase in additional documentation required by this permit, permittees should be allowed to gradually document their procedures over the full five-year permit period.**Item 16.****Part:** 4.2.3 Illicit Discharge Detection and Elimination**Location:** Page 23, list items 6 and 7, and pages 25-26, management measures table, 3rd row of 1st column and 3rd and 4th row of middle column**Comment:** A permittee may not always be able to determine the source and discharger for a confirmed illicit discharge. So, being able to initiate enforcement and/or receive corrective action plans for 100% of confirmed discharges may not always be possible. Suggest parts 6 and 7 and the corresponding management measure be rewritten to allow for this situation so permittees do not have compliance liability if they cannot readily identify a source and discharger.**Item 17.****Part:** 4.2.3 Illicit Discharge Detection and Elimination**Location:** Page 24, list items e and f**Comment:** Suggest these sections refer back to Part 4.2.1.1. and 4.2.2.1, respectively**Item 18.****Part:** 4.2.3 Illicit Discharge Detection and Elimination**Location:** Page 25, management measures table, third row, middle column**Comment:** The measurable goal wording is confusing and focuses on tracking the reporting source rather than the illicit discharge complaint itself. Suggest rewording to say something like “track all potential illicit discharges reported, categorized by reporting source (public or permittee staff)”.**Item 19.****Part:** 4.2.3 Illicit Discharge Detection and Elimination**Location:** Page 27, management measures table, last row, middle and last columns**Comments:**

1. The requirement to conduct or sponsor at least one activity that fosters interagency coordination places permittees in jeopardy of potential enforcement by the Division for the action (or inaction) of agencies should be removed. Activity effectiveness is not within the control of the permittee. The majority of other agencies involved in hazardous waste or material spills response and cleanup operate independently from a permittee's stormwater department, nor are they subject to this permit. As a result, they may not feel

compelled to participate in an annual interagency activity needed by the permittee. Suggest eliminating this as a required activity. Or, alternately, the activity could be revised it to a minimum requirement for annual (one-way if necessary) contact from the permittee to other agencies (e.g., a letter from the permittee advising other agencies of the permittee's interest and responsibilities with respect to hazardous waste and materials spills, requesting or outlining permittee involvement when issues occur, and providing permittee contact information).

2. It is not clear how the last two bullets of the last column (pertaining to a target audience) are associated with IDDE requirements. Please clarify.

Item 20.

Part: 4.2.4. Construction Site Stormwater Runoff Control

Location: Page 28, list item a

Comment: Item a, with its specification of a 12 month timeframe for ordinance updates, is in conflict with implementation dates specified in the first and second rows of the table provided in Part 4.1.2, which state ordinance updates are required within 24 and 18 months, respectively.

Item 21.

Part: 4.2.4. Construction Site Stormwater Runoff Control

Location: Page 29, list items f and h

Comment: Please indicate if these procedures must be in the form of a written document. If so, please provide a clear deadline for preparing this plan. Given the increase in additional documentation required by this permit, permittees should be allowed to gradually document their procedures over the full five-year permit period.

Item 22.

Part: 4.2.4 Construction Site Stormwater Runoff Control

Location: Page 29, list item f

Comment: Past small MS4 permits have already resulted in local government processes that eliminate (or severely limit) the commencement of land disturbance activities without an approved plan for construction site stormwater runoff control. This control is clear, effective, and implementable. Thus, it is difficult to understand the Division's desire in this permit to require specification, or even address the topic, of a timeframe for construction site plan reviews in this draft permit. Plan review timeframes are outside the scope of water quality protection and permitting. Thus, forcing permittees to specify plan review timeframes solely for purposes of permit compliance is unnecessary for water quality protection and an overstepping of the Division into individual local government land development processes to the primary benefit of land developers.

Plan review timeframes can vary widely based on matters unrelated to permit compliance. These include zoning/subdivision/site planning code variances, the role(s) of other departments involved (e.g., planning, codes enforcement, etc.), local government staffing issues (which have been significant since the COVID pandemic), legal issues surrounding a specific land development, the completeness and quality of the submitted plan, and many other factors. A MS4 permit-specified timeframe can unnecessarily complicate these issues in ways that are not easily resolved, ultimately resulting in activity non-compliance. Thus the draft permit's requirement for a plan review timeframe sets-up permittees for compliance failure on an issue that has nothing to do with water quality protection.

Item 23.

Part: 4.2.5.2 Permanent Stormwater Standards

Location: Page 32, list item d

Comment: For many permittees, modification of their current permanent stormwater management programs to one that is compliant with the new permit will take significant planning. Permittees should be given at least 120 days after the effective date of the final permit to prepare the implementation plan.

Item 24.

Part: 4.2.5.2 Permanent Stormwater Standards

Location: Page 33, list item c, 3rd sentence

Comment: The sentence regarding uncontaminated roof runoff should be deleted from the permit. Scientific data is limited and generally does not support the position that roof runoff is uncontaminated. Further, common sense does not support the position that roof runoff is uncontaminated (i.e., contains no other substances than rain/storm water). Rather, it is easy identify possible contaminants and their sources.

- Landscape debris, dust, sediment, and other pollutants can be dropped by nearby trees or deposited on the roof via wind/air deposition.
- Feces can be deposited by birds and pathogens can be deposited from carrion dropped by predatory birds.
- Rainfall contamination is another key source of pollutants for some areas.
- For some roof types, the roofing material itself can deliver contaminants in stormwater. For example, asphalt roofs release grit/particles that are carried from the roof through downspouts.

No roof is free from such exposures. Further, the sentence crafted by the Division is permissive, which allows permittees the ability to NOT exclude uncontaminated roof runoff. However, due to the very nature of roof runoff contamination, creating a permissive authority causes undo complexity at the local level to defend the issue. It places the responsibility of defining uncontaminated roof runoff on the permittee, without the safety of typical bona fides should a permittee's program be challenged. Such bona fides include the following.

1. Explicit coverage for roof runoff discharges under this permit, or under any other State or Federal permit is not provided.
2. Precedence for inclusion of similar exclusions of roof runoff (or a successful defense of challenges to similar statements) in other Federal or state municipal or NPDES permits or programs likely do not exist.
3. A basis in science and engineering that allows permittees to safely qualify or set criteria for defining uncontaminated roof runoff (i.e., what types of roofs, roof locations, land use, etc.) has not been developed. Generally, most permittees have neither the knowledge nor resources to develop the scientific basis needed to craft criteria for uncontaminated roof runoff to the degree that they can overcome concerns 1 and 2 listed immediately above and defend their criteria if challenged by EPA, the Division, land development stakeholders, and/or environmental defense stakeholders.

From an administrative perspective, eliminating a portion of a site's impervious area (i.e., rooftops) from stormwater quality requirements when stormwater quantity requirements (i.e., detention and conveyance) still apply will require significant additional attention to detail for permittees during plan review and approval, construction inspection and enforcement, SCM definition, tracking, and maintenance. As new development and redevelopment within a subdivided site occurs, the separation of roof runoff must be tracked so that new design plans take the exclusion into account. Ultimately, the management of this exclusion will require more permittee staff resources to administer for the life of each site designed in this manner.

From an SCM design perspective, splitting roof discharges from other stormwater flows can be tricky to design, especially for residential developments. A fallback approach for this would be to just credit the roof area from the WQTV calculation without actually diverting the runoff onsite and allowing an equivalent portion of impervious area to runoff untreated or just under-sizing the SCM. (These situations are not prohibited by the draft permit and

will be attempted by site designers.). So, sending roof runoff to a SCM and not accounting for the volume of the roof inherently makes the SCM undersized and thus, it neither functions as intended nor provides the treatment required.

As the Tennessee Rule 0400-40-10-.04 progressed through its own approval and adoption, the Division staff have been asked about the uncontaminated roof runoff sentence by several parties. Division responses have included the statement that the sentence is permissive, therefore permittees do not have to exclude roof runoff if they do not want to. With this answer, the Division has been unwilling to eliminate the sentence. However, this response lacks an understanding by the Division of municipal stormwater regulation and administration and of the poor position the Division has placed permittees in as a result of the sentence. It places them in a defensive posture, without providing the basis at the State level to defend local government decisions.

Finally, even the valid arguments made above against a roof runoff exclusion, many permittees will not be able to withstand political pressure to allow the exclusion from land development stakeholders seeking to weaken local stormwater quality standards. As we have seen in recent years, such challenges are often decided by politics as opposed to scientific understanding, environmental permit compliance liabilities, municipal resource needs and balancing, or even water quality protection goals. Thus, by including this sentence in the permit, the Division has placed permittees in jeopardy of allow pollutant discharges that will be difficult to defend.

Item 25.

Part: 4.2.5.2 Permanent Stormwater Standards

Location: Pages 33 through 35, Water Quality Treatment Volume and Corresponding SCM Treatment Type table

Comment: The Division should readily accept and allow the use of 80% TSS Removal approaches based on work of Richard A. Claytor and Thomas R. Schueler in 1996 (*Design of Stormwater Filtering Systems*, 1996), henceforth called “the traditional approach” based on a 1.25” rainfall for WQTV as equivalent to that defined in Part 4.2.5.2 parts b, c, and d. Requiring permittees that have already implemented the traditional approach to modify their ordinance and design support tools or obtain coverage under an individual permit simply to adhere to a prescribed, but no better, approach is unnecessary and costly. Ultimately, such change will not provide an increased level water quality protection than is already implemented by these permittees. There should be a way for TDEC to accept alternate, equivalent approaches from permittees who have already adopted said methods without forcing the permittee to obtain an individual permit. Suggest possibly adding a line such as “*Permanent stormwater programs that:1) require 80% TSS Removal of a WQTV no less than 1-inch for infiltration SCMs without an underdrain and 1.25” for non-infiltration SCMs (regardless of SCM treatment type); and 2) have already been adopted prior to the effective date of this permit are considered compliant with this Part.*”

Rationale for this comment is as follows.

- The tiered WQTV approach adopted in Tennessee Rule 0400-40-10-.04 and now in the draft permit displays a lack of understanding in the long-standing traditional approach. To date, the Division has provided no scientific basis for the tiered WQTV approach as being more protective than the traditional approach. Nor is the tiered approach more quantifiable, easier to understand, or easier to apply. It is simply a different method to meet the goal of 80% TSS Removal of the WQTV, but no better or worse than the traditional approach.
- In discussions about the traditional approach, Division staff have expressed a dislike for the traditional approach’s imperviousness parameter “Rv”. However, when the traditional approach is applied on impervious area only, its results are no different than the WQTV that would be obtained using the draft permit’s tiered approach. When applied over an entire drainage basin (including pervious areas), the Rv parameter considers green space but does not reduce the impact or treatment of impervious surfaces. Thus, it provides an inherent added incentive for the use Low Impact Development (LID). Thus, it could be

argued the traditional approach is a “greener” and possibly more effective approach than what is provided in Tennessee Rule 0400-40-10-.04 and the draft permit.

- The traditional approach is widely accepted as a credible and permit-acceptable approach for post-construction stormwater quality management throughout United States east of the Rocky Mountains. In fact, this approach been used in the State of Tennessee since the early 2000’s and, until this permit, been accepted by the Division as compliant. Since the traditional approach **REQUIRES** the use of treatment trains when an SCM alone cannot meet the 80% TSS removal of the WQTV standard, it is **NO LESS PROTECTIVE** than the tiered approach.
- Many Tennessee permittees have already implemented a traditional 80% TSS Removal program for compliance with prior small MS4 permittees. To date, these programs have been deemed compliant by the Division. For the permittees providing these comments, it would not be significant to adhere to a 1.25” WQTV requirement for all SCMs, provided the required 80% TSS removal is met under the traditional approach. This SHOULD BE VIEWED AS EQUIVALENT BY THE DIVISION BECAUSE IT IS EQUIVALENT. However, **to modify an already compliant post-construction program to the tiered approach is much larger effort that will require significant time and financial resources. It will also require a significant level of staff and stakeholder training and education to understand. Yet, the level of water quality protection that results from this change will be no different.** For resource-strapped TN permittees, this is an unnecessary use of public dollars and a waste permittee staff time.

Item 26.

Part: 4.2.5.2 Permanent Stormwater Standards

Location: Page 33 Water Quality Treatment Volume and Corresponding SCM Treatment Type table

Comment: The tiered approach provided in the table shows a lack of understanding in the complexity of municipal land development regulation as it pertains to stormwater in many areas of Tennessee. The tiered approach targets green infrastructure without an underdrain (i.e., infiltration, evaporation, transpiration, and reuse) as the SCM treatment type of choice since it has the lowest required WQTV. However, it does not recognize the substantial feasibility issues associated with these types of SCMs:

- infiltration SCMs without an underdrain are rarely feasible in urban, semi-urban, and suburban settings in many parts of Tennessee. Physical and hydrologic constraints are prevalent, such as poorly-draining soils, high slopes, and karst features. Biofiltration with an underdrain is often the better approach because it balances water quality protection with safety, drainage, and maintenance concerns.
- Capture and reuse SCMs such as green roofs and cisterns are SCM options that many permittees avoid because of concerns about maintenance oversight and enforcement. Since these SCMs are often attached to a building, they cannot be placed into maintenance easements, which is a legal tool for maintenance oversight used by many permittees. They also require a continual level of operation on behalf of the property owner that is difficult to inspect (even with right of entry).

Thus, the tiered approach in the draft permit promotes largely unfeasible SCMs at the WQTV expense of other quasi-green infrastructure approaches (e.g., biologically active filtration with an underdrain) that are often more feasible. Allowing the lower WQTV requirement for biologically active filtration may have a long-term positive impact on water quality.

Item 27.

Part: 4.2.5.2 Permanent Stormwater Standards

Location: Page 34, SCM Treatment Type Table, last row, and list item d. Treatment Train Calculations

Comment: Questions regarding MTDs in treatment trains.

1. If a flow-through MTD must provide an overall treatment efficiency of at least 80% TSS reduction (as required per the last row and last column of the table), then why would the MTD be used in a treatment train? It satisfies the requirement as a standalone MTD and a second SCM is not necessary.
2. Is there any volume criterion associated with the use of MTDs in a treatment train? For example, a designer wants to use a sand filter SCM for water quality treatment but cannot size it to control the entire WQTV.
 - a. If they opt to place a flow-through MTD upstream of the sand filter, is there a WQTV requirement for the MTD? If the answer to the question is the WQTV requirement for the MTD is the “maximum runoff generated from the entire design storm” per the SCM treatment table, then why is there a need for the treatment train? Doesn’t the MTD alone satisfy the 80% TSS removal requirement?
 - b. Is there a minimum WQTV requirement for the sand filter (i.e., the downstream SCM)?

Item 28.**Part:** 4.2.5.2 Permanent Stormwater Standards**Location:** SCM Treatment Table**Comment:** Do MTDs used for SCM pretreatment purposes need to have a minimum treatment efficiency?**Item 29.****Part:** 4.2.5.2 Permanent Stormwater Standards**Location:** Page 35, list item f.3**Comment:** Incentives can take time to develop and adopt. Sometimes they are identified as a result of other stormwater program activities, such as the implementation of a stormwater utility or a change in stormwater utility rate. Also, incentives do not often require a change to an ordinance, so from the permittees perspective would not necessarily need to be done during the (maximum) 24-month implementation period specified by the permit. Is there a deadline for submitting incentives to the Division or can they be developed and submitted at any time during the 5-year permit period?**Item 30.****Part:** 4.2.5.4 Water Quality Riparian Buffers**Location:** Page 36, first paragraph, first sentence**Comment:** The permit should define the expectations for permittees to “protect and maintain” permanent water quality riparian buffers.**Item 31.****Part:** 4.2.5.6 Development Project Plan Review, Approval, and Enforcement**Location:** Page 38**Comment:** Please indicate if these procedures or processes must be in the form of a written document. If so, please provide a clear deadline for preparing this plan. Given the increase in additional documentation required by this permit, permittees should be allowed to gradually document their procedures over the full five-year permit period.**Item 32.****Part:** 4.2.5.7 Maintenance of Permanent Stormwater Control Measure Assets

Location: Page 39, list item b.3

Comment: Delete “agreement” and replace with “instrument”. Local law departments for some permittees are unwilling to support their own jurisdiction’s use of SCM maintenance agreements. Rather, these law departments identify and support other legal instruments, including but not limited to ordinance requirements, plat notes, easements, and deed restrictions, as sufficient and effective to compel and enforce property owner maintenance of SCMs and permittee right-of-entry for inspections and enforcement. The Division should not be predicating the type of local legal mechanisms used by a local government to compel compliance, but rather the legal authorities and rights needed for compliance.

Staff of the Division have indicated verbally (in past discussions) the requirement for a maintenance agreement is the Division’s preferred method of: 1) compelling maintenance; and 2) ensuring the SCM owner or maintainer is aware of their responsibilities. However, experience throughout Tennessee since 2008 indicates that a maintenance agreement typically does not increase SCM owner awareness, even at the time property changes ownership. Rather, locally-appropriate legal instruments (not necessarily an agreement) combined with consistent owner communication and education regarding SCM maintenance responsibilities are the key to a more effective SCM maintenance. The permit should reflect this knowledge of Tennessee permittees and not rely so heavily on a maintenance agreement as the critical component for permanent stormwater management programs.

Item 33.**Part:** 4.2.5.9 Management Measures, Goals, and Annual Report Requirements

Location: Page 41, table first rows pertaining to Stormwater Mitigation and Public Stormwater Fund

Comment: The measurable goals and annual report requirements are difficult to understand and do not track back to the requirements stated in subpart 4.2.5.3, which say nothing about project completion. It is understandable that the Division wants to see that all projects entering a mitigation process are accounted for. However, the measurable goals and annual report requirements predicate project processes that will likely differ from how a viable mitigation and/or fee-in-lieu program actually works and secures funding over time. Some programs may work within the annual budgeting of a stormwater utility and others may secure funding through multi-year program grants. Instead of writing measurable goals and annual report requirements for permittees, the Division should allow permittees to write their own measurable goals that best fit their offsite and fee-in-lieu programs.

Item 34.**Part:** 4.2.5.9 Management Measures, Goals, and Annual Report Requirements

Location: Page 42, table row pertaining to policies for submittal and review of plans (subpart 4.2.5.6a)

Comment: Eliminate the measurable goal and annual report requirements pertaining to reviewing plans within a certain timeframe. What does a plan review timeframe have to do with effective water quality protection under the permanent stormwater minimum control measure? Plan review timeframes can vary widely among permittees, depending on matters unrelated to permit compliance. These include a local government’s land development process, the role(s) of other departments involved (e.g., planning, codes enforcement, etc.), permittee staffing issues, legal issues surrounding a specific land development, the completeness and quality of the submitted plan, and other factors. Forcing permittees to specify plan review timeframes solely for purposes of permit compliance is unnecessary for water quality protection and an overstepping of the Division into individual local government land development processes.

Item 35.**Part:** 4.2.6 Pollution Prevention/Good Housekeeping

Location: Pages 43 and 44

Comment: Page 43 talks about an O&M program while page 44 talks about an O&M Facility Plan, without actually stating a requirement for a “plan”.

1. Please correct or clarify, differentiating between the two if both are required.
2. Please clarify which items, if any, must be established or provided as written documentation along with a clear deadline for preparing these plans, and whether (or not) the facility plans must be submitted. Given the increase in additional documentation required by this permit and the fact that O&M Facility Plans may identify new resources or equipment needs at facilities, permittees should be allowed several years to budget for and prepare these plans, and then the remainder of the five-year permit period to fully implement them.

Item 36.

Part: 4.3 Qualifying Tribe, State or Local Program (QLP)

Location: Page 45

Comment: The definition of a QLP in the first sentence of the Part implies the Division can designate QLPs on their own. It is suggested this be revised to indicate the MS4 must desire and apply for QLP status or otherwise has a say in being identified as a QLP.

Item 37.

Part: 4.4.1.1 Minor Modifications

Location: Page 47, item a

Comment: What is a component, control, or requirement to the SWMP as opposed to a BMP/activity?

Item 38.

Part: 4.4.2 Stormwater Management Program Updates Required by the Division

Location: Page 49, first sentence of subpart

Comment: The phrase “as needed” is too broad, essentially allowing the Division to compel SWMP changes beyond the scope of the permit. These words should be replaced with “in keeping with the requirements of this permit”.

Item 39.

Part: 4.5.4 Requirements for Chronic Violators

Location: Page 52, first sentence of subpart

Comment: The first sentence should end after the word “component” and the remainder of the sentence deleted.

Item 40.

Part: 4.6.1.1 Monitoring

Location: Page 54, first paragraph, second sentence

Comment: Please clarify if the description of the monitoring program must be in the form of a written document.

Item 41.

Part: 4.6.2 Storm Water Management Program Evaluation

Location: Page 58

Comment: The requirement for a SWMP Evaluation Report should be eliminated from the draft permit. Permittee evaluation of their stormwater management program has always been required under prior permits and is documented in their annual reports (e.g, 2020-21 Small MS4 Permit Annual Report Part 8). Why is it now necessary for permittees to create yet another written document to address a requirement already provided for under the annual report? Further, why is it necessary for the SWMP Evaluation Report to restate program activities already provided and described under the NOI, annual report, newly required sub-plans (e.g., publicity plan, implementation plan, etc.), and other written elements of the SWMP? This additional paperwork for permittees does not improve the potential for program effectiveness because permittee resources will be spent on paperwork rather than water quality protection.

Item 42.

Part: 4.7.1 Annual Report Requirements for Legal Authority

Location: Page 60

Comment:

1. This requirement is unnecessary given that legal instruments and authorities are reviewed within each permittee's jurisdiction when they are written, modified, and/or considered by elected governing bodies. Further, it is not clear why it is necessary for a permittee to have a solicitor certify these requirements when the NOI and all annual reports, both of which address these legal instruments and authorities, are signed by the principal executive officer or ranking elected official of the permittee. That signature alone should indicate acceptance of these legal instruments and authorities by the permittee.
2. If the requirement for a signed solicitor's certification statement remains in the draft permit, making this an annual requirement is unnecessary and likely much more cumbersome than the Division realizes. It is suggested the requirement be changed to obtain the certification once every five year permit period and/or whenever a legal instrument is modified administratively or adopted by the governing body.

First, legal instruments are typically reviewed and approved by local government attorneys/legal departments before they are considered for adoption by the governing body. So, adoption alone can indicate a legal review and approval has already occurred. Second, an annual certification is unnecessary because legal instruments do not change/undergo adoption on a routine basis. Most permittees operate under an adopted legal instrument for many years before making changes and securing approvals from legal and governing agencies. Finally, securing the interest and signature of local government attorneys or legal departments typically requires significant advance notice and administrative interactions to allow the attorneys the time to understand, review, and act upon the request for a signature..

Item 43.

General Nomenclature Comments:

1. The words "stormwater" and "storm water" are used inconsistently throughout the permit. Suggest the Division pick one word or two and be consistent thereafter.
2. The permit uses the words "BMP" and "activity" interchangeably. Please provide consistency throughout the permit with these terms and specify if there is a difference in the two words.

From: Kuo, Mary <Kuo.Mary@epa.gov>
Sent: Monday, May 23, 2022 9:31 AM
To: Ariel Wessel-Fuss; Vojin Janjic
Cc: Hesterlee, Craig
Subject: [EXTERNAL] TNS000000

Vojin,

EPA Region 4 has reviewed TDEC's draft Small MS4 General Permit, which was received on 3/22/22. The permit requirements are clear, specific, and measurable. However, Tennessee will need to indicate in the final permit or fact sheet which small MS4 permitting approach is being used to satisfy the requirements of the Remand Rule at 40 CFR 122.28(d). Note that we did not see a fact sheet in the online permit file.

Additionally, we are aware of concerns over the exemption over uncontaminated roof runoff from the water quality treatment volume. EPA suggests that TDEC consider these comments when finalizing the permit.

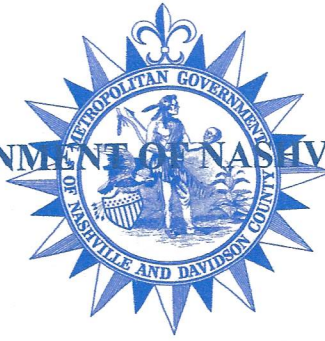
We request an additional review opportunity if any significant changes are made to the proposed permit prior to issuance or if significant comments objecting to the permit are received during the comment period.

Thank you, Mary

Mary Kuo
EPA Region 4, Water Division
NPDES Permitting Section
404.562.9847

JOHN COOPER
MAYOR

METROPOLITAN GOVERNMENT OF NASHVILLE AND DAVIDSON COUNTY



DEPARTMENT OF WATER AND SEWERAGE SERVICES
STORMWATER DIVISION
NPDES OFFICE
1607 COUNTY HOSPITAL ROAD
Nashville, Tennessee 37218

May 23, 2022

Re: TDEC Draft Phase II MS4 Permit - Comments

To Whom It May Concern:

The Metropolitan Government of Nashville/Davidson County (Metro) operates under a Phase I Municipal Separate Storm Sewer System (MS4) permit. While the new draft language of the Phase II MS4 permit will not necessarily pertain to Metro Nashville, it is possible that certain provisions within the Phase II permit may potentially be incorporated into language of future, reissued Phase I MS4 permits within Tennessee. As such, Metro Nashville has reviewed the draft Phase II MS4 permit and wishes to provide the following comments:

- **Section 4.2.5.2 (Uncontaminated Roof Runoff)**: This section for the first time in the subject permit and seemingly elsewhere in the MS4 permitting realm formally introduces the concept of excluding this type of impervious area runoff from the WQTV. This obviously represents a significant new element for MS4 permittees and one that warrants additional clarification from TDEC as various entities are certain to disagree on the exact meaning of the term “uncontaminated.” As mentioned by other public hearing commenters, much research exists on pollutant constituents of roof runoff, which further warrants a scientific-based clarification on this element of the draft permit and the basis of it being added to this draft as there was no related discussion in the permit rationale. Roof locations (re animal impacts, nearby facilities, and material deposition), roofing material, roof vents and various other considerations represent not only short term difficulties in ascertaining the nature of a site’s roof runoff nature, but also any number of changing facility circumstances over time may create further complications. From an MS4 programmatic consideration, this concept would also seem to potentially introduce a much more involved construction site and eventual SCM evaluation/inspection element onto MS4s in having to potentially track, inspect and verify (in perpetuity) certain elements of private drainage features – to verify which stormwater infrastructure features route exempted roof runoff solely to stormwater quantity SCMs vs stormwater quality SCMs, etc.

- **Section 4.2.5.9 (Management Measures, Goals and Annual Report Requirements):** As it relates to this measure...

Develop, implement, and enforce policies and procedures for the submittal and review of plans as required by 4.2.5.6a	Establish a time frame for review of all plans and review 100% of all plans within that timeframe	- Total number of plans reviewed
		- Percentage of plans reviewed within the established timeframe

While this “measurable goal” is certainly a valid consideration for municipal operations in providing good community and customer service, this goal is not appropriate in a regulatory context for MS4 permit compliance as it has no true/direct correlation to water quality discharges from permitted MS4 outfalls. It should be replaced with a more appropriate goal directly related to the nature of permitted storm water discharges and their quality.

- **Section 4.2.3 (Illicit Discharge CAP Requirement after 14 days):** We would suggest the requirement to ‘request Corrective Action Plans from responsible parties that take longer than 14 days to eliminate an illicit discharge’ be modified to add an “As Soon as Possible” provision for situations in which the responsible party is not known. In our IDDE experience, there can be certain urban area circumstances in which it is difficult to identify a legally “responsible party.” Such illicit discharges require source tracking and other such surveillance methods that can involve a significant amount of time.
- **General comment:** As more non-MS4 entities become involved with the ongoing MS4 permit issuance process over time, to include them facilitating the introduction of new/modified MS4 permit elements into MS4 permits; we would recommend that TDEC create a process whereby MS4s can have some input on all such changes prior to their placement into MS4 draft permits. Given MS4 permittees are ultimately responsible for permit compliance (and certain other related water quality considerations like TMDL WLAs), it would seem appropriate to give them an opportunity prior to the draft permit public notice to evaluate any such proposed changes and provide TDEC feedback on the functional, process related and operational viability of any such new/revised MS4 permit provisions.

We appreciate your considerations of our comments and if you have any questions, please don’t hesitate to contact me at 615-880-2420.

Sincerely,



Michael Hunt
Metro Water Services, Stormwater NPDES
MS4 Program Manager

May 23, 2022

Ms. Ariel Wessel-Fuss
Tennessee Department of Environment and Conservation
Division of Water Resources
William R. Snodgrass Tennessee Tower, 11th Floor
312 Rosa L. Parks Avenue
Nashville, TN 37243-1534
Delivered via email to Ariel.Wessel-Fuss@tn.gov

Dear Ms. Wessel-Fuss:

Subject: Comments on the Draft Tennessee National Pollutant Discharge Elimination System (NPDES) Permit No. TNS000000 Small Municipal Separate Storm Sewer Systems

Civil & Environmental Consultants, Inc. appreciates this opportunity to provide comments on the Draft Tennessee National Pollutant Discharge Elimination System (NPDES) Permit No. TNS000000 Small Municipal Separate Storm Sewer Systems. The comments provided below apply to the sections of the draft MS4 permit specified.

Section 4.2.5.2.a

“For design purposes, total suspended solids (TSS) **may** be used as the indicator for the reduction of pollutants.”

Question:

What other pollutants would TDEC consider in lieu of TSS?

Section 4.2.5.2.c.

Regarding the sentence, “Uncontaminated roof runoff may be excluded from the WQTV.”

Question:

Can TDEC please clarify under what conditions exclusion of roof runoff from the WQTV applies and how the uncontaminated nature of roof runoff is determined?

- If roof runoff mixes with parking lot runoff, for example, when roof downspouts discharge to a parking lot, is the intent that the volume contribution from the roof be excluded from the WQTV? Alternatively, is the intent to be able to exclude the roof runoff only when that runoff discharges directly to pervious areas? In other words, is this a hydrologic modeling separation regardless of how the roof runoff discharges, or is this an exclusion based on physical separation of the roof runoff from other impervious surface area discharges?

May 23, 2022

- Is it TDEC's intent to assume all roof runoff is uncontaminated? CEC understands other comments have been submitted regarding the nature of roof runoff, but who will be responsible for making the determination regarding the nature of the runoff? Does TDEC envision this being a project-by-project determination or a programmatic determination?

Section 4.2.3.1.

Regarding MS4 Storm System Map Requirements

a. Outfalls

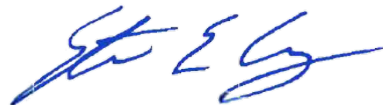
Question:

The definition of point source (or outfall) that is provided within the MS4 permit and the mapping requirement listed does not specify MS4 outfalls. However, later in the permit in Section 4.6.1.1.1 'outfall' has the qualifier, 'MS4' in front of the term: "...visual stream survey must be performed immediately upstream and downstream of each **MS4 outfall** that discharges into that stream segment." Is it TDEC's intent that the storm system map include only **MS4** outfalls?

Please feel free to contact us at 615-333-7797 should you have any questions regarding our comments.

Sincerely,

CIVIL & ENVIRONMENTAL CONSULTANTS, INC.

A handwritten signature in blue ink, appearing to read "Steve Casey", is positioned above the printed name.

Steven E. Casey, P.E., CPESC
Vice President

From: [Ariel Wessel-Fuss](#)
To: [Liz Campbell](#)
Subject: FW: comments on the new MS\$ permit
Date: Monday, April 25, 2022 8:13:11 AM

From: David Carver <dcarver@seviercountyttn.org>
Sent: Monday, April 25, 2022 8:02 AM
To: Ariel Wessel-Fuss <Ariel.Wessel-Fuss@tn.gov>
Subject: [EXTERNAL] comments on the new MS\$ permit

1. 4.2.2 – The Stormwater Management Program – is a program of implementing a plan. This plan was and is developed as a type of Standard Operating Procedure. The general public should not have any comment on how the plan is developed for government office to conduct its procedures which are already under TDEC revision. This is redundant and an unnecessary.
2. 4.2.3 – The Management Measure requires the permittee to “coordinate with these agencies to develop a program that minimizes the potential for their response to spills of chemicals or hazardous materials to cause pollutants to enter waters. – These agencies are trained in hazardous spill response as first responders. Would this type of training and program not be better regulated and prioritized through FEMA and TEMA and the FIRE and EMS first responder training programs? This is asking untrained responders to coordinate with TRAINED first responders about how to better do their job.
3. 4.2.4 – Annual Report Requirements column – Why are we entering in the # of last years active permits on this years annual report when the data is in last years annual report? It is a good thing TDEC has specified that non priority construction sites only require 10% inspection, 11 different numbers to be documented and tracked for illicit discharges, four different details to be tracked for each of nine different public education events, four different details to be reported for each of the six engineering and development public education events, four different details for each of the nine different public involvement events, four details of each of the six different public involvement events for commercial and development folks – MS4 people are going to spend the rest of the year tracking data for the annual report (harsh I know) but consider reducing the trivial or repetitious data to be required in the new annual report please.
4. 4.4.1.2 – This requirement opens up MS4’s to law suits by groups who question internal policies and procedures when TDEC has always given regulations and specified that the MS4 tell TDEC how they will apply the regulations within each jurisdiction. This is overreaching. TDEC is the auditing agency. Let TDEC review and comment in the minor or major SWMP changes since all historical MS4’s already have copies of these documents on file.
5. 4.2.6 – Option 2 is a great tool devised by TDEC

From: Ariel Wessel-Fuss
Sent: Tuesday, April 26, 2022 4:59 PM
To: Liz Campbell
Subject: FW: [EXTERNAL] Draft Small MS4 General Permit Questions and Comments

Please add to the MS4 Comment Document.

Thanks,

Ariel

Ariel Wessel-Fuss| Environmental Protection Specialist
Division of Water Resources
William R. Snodgrass Tennessee Tower, 11th Floor
312 Rosa L. Parks Avenue
Nashville, Tennessee 37243
p. 615-532-0642 f. 615-532-0686
Ariel.Wessel-Fuss@tn.gov
tn.gov/environment

We value your feedback! Please complete our customer satisfaction survey.

From: Bradly Jordan <bradly.jordan@townofsmyrna.org>
Sent: Tuesday, April 26, 2022 4:50 PM
To: Ariel Wessel-Fuss <Ariel.Wessel-Fuss@tn.gov>; Water Permits <Water.Permits@tn.gov>
Cc: Greg Upham <greg.upham@townofsmyrna.org>
Subject: [EXTERNAL] Draft Small MS4 General Permit Questions and Comments

Hi,

Find below a list of comments and questions regarding the Draft Small MS4 General Permit on the behalf of the Town of Smyrna Stormwater Department.

1. Can a single event count as both education and outreach (4.2.1.1.) and public involvement (4.2.2.1) if all criteria are met? For example, if we pass out educational brochures and talk about the effects of littering during a public involvement stream clean-up.
2. In section 4.2.1.3. the target audience specifies that public employees must be educated "dependent on job function and duty location." However, in the table on the next page, it says that "permittees must train all employees..." Please reflect the table to only require relevant employees to be trained.
3. In the same section (4.2.1.3.) we believe that it is only necessary to train new relevant employees once upon hiring instead of all employees annually.
4. In section 4.2.2.2. it seems excessive to have as many commercial and development community public involvement events as are listed. We believe the minimum numbers would be better capped at 4 for a population over 50,001 to allow for more focus and attention on the more impactful general public events.

Bradly Jordan
Environmental Technician

Town of Smyrna
315 South Lowry Street
Smyrna, TN 37167
(615)-557-3559
bradly.jordan@townofsmyrna.org

Ped Public Hearing Comments

Draft sMS4 GP

April 26, 2022

Good evening. I'm Paul Davis. I'm a licensed professional environmental engineer. I was with Tennessee's water pollution agency for 38 years and was director of Water Pollution Control for 24 of those years. Since 2012, I've prepared and delivered over 150 stormwater classes from New Mexico to Maine, plus a number of on-line classes, through National Stormwater Center. I've had staff from hundreds of MS4s along with federal and state agency staff, consultants, industries, water advocates and citizens in those classes.

I'd like to start with a reminder of what was said about MS4 discharges in the State of Tennessee's 2018 document, TNH2O, Natural Resource Chapter. Here's that quote - "MS4 discharges are by far the leading pollution source in Tennessee that is subject to regulation." It was true in 2018 and it's true today. So this is one of the most important permits TDEC will ever issue. It's important to Tennessee that we get it right.

I'll make just 3 comments now and add more when I send written comments for the record.

First Comment

On March 3rd TDEC's permit writer for this permit attended a TNSA meeting in Murfreesboro and spoke about the changes we could expect to see. One of those was how each of the 6 Minimum Control Measures would be broken down into tasks and for each task the permit would establish measurable goals and annual reporting requirements.

That's just what she did. The result is permit requirements that are much more clear, specific and measurable in terms of what's to be done, how many and when, and how they're to be reported - significantly improving the permit. I see this change as helpful to MS4s and useful to the public. It's an important step toward cleaner urban waters.

I've seen lots of state MS4 permits in the last decade, but none better in this regard.

And there are other improvements in this draft. So thanks for all of those.

Second Comment

Some other parts of this draft I'm less grateful for.

The section titled Permanent Stormwater Standards at Part 4.2.5.2.c., on page 33, has these words "Uncontaminated roof runoff may be excluded from the WQTV." (meaning Water Quality Treatment Volume) So the permit would allow designers of post-construction stormwater control measures to pretend that some portion, even the major portion, of impervious surface area simply doesn't produce runoff when it rains.

It's illogical, it goes against principles of water engineering, and it violates the federal requirement for control of post-construction discharges to the maximum extent practicable.

Consider these 6 points:

1. Section 4.2.5 says it's about post-construction/permanent stormwater management. In urban settings, no runoff from impervious surfaces, including roofs, is uncontaminated, much less permanently uncontaminated. Contaminants – solid and dissolved - come from a range of deposition sources like dust, pollen, fallout from combustion, from wildlife... as well as from weathering and decomposition of the roof itself. A Google search will bring up several confirming studies. So the qualifier "uncontaminated" effectively negates that whole roof exclusion sentence.
2. Design precedes construction. As that sentence is written, excluding roof area would require that the designer somehow know before the roof is constructed that its runoff would be uncontaminated – and since these are permanent controls it would need to be permanently uncontaminated. Of course, that's not possible.
3. No other state I've prepared for has such an exclusion, no Tennessee border state, no state where EPA retains permit authority... I don't believe there is any state, tribe or territory where roofs are excluded from post-construction control requirements. For any reason. So why is that? Green roofs and blue roofs are stormwater control measure themselves – and a whole different subject.

4. Several MS4s in Tennessee, including those operating under individual as well as general permits, have for a decade or more required post-construction controls. None have allowed exclusion of roof area. So it's entirely practicable to design, construct and maintain stormwater control measures for the whole impervious area. That's happened in Tennessee for years.
5. Roofs may be as much as 90% or more of the impervious surface at new development or redevelopment sites. A stormwater treatment measure whose design is based on less impervious drainage area than it will actually receive will be proportionally undersized. That's less control, certainly not control to the Maximum Extent Practicable.
6. It's not fair to Tennessee cities and counties to put them in the position of defending their water protection programs against this provision in the state permit.

Third Comment

It's well-accepted that the best control for post-construction runoff is for it to infiltrate into suitable soil or media.

Stormwater people know that one of the keys to effective infiltration is to keep the infiltration area from getting blanketed with silt. That's just what can happen when high water events flood the buffer. That's why Metro Stormwater and other MS4s I'm familiar with don't allow it.

But the new draft at Parts 4.2.5.4.b and c, on pages 36 and 37, explicitly allows infiltration-based stormwater control measures in the riparian buffer.

Yes, cities and counties could require through ordinances that infiltration must be located so as to protect effectiveness. But I know now after 10 years of hearing from Tennessee MS4s and hundreds of MS4 staff from across the country just how hard it is for them to require protection beyond what their state says is sufficient. Inviting placement of infiltration-based controls in riparian buffers is not sufficient protection. So please take another look at that language to see if the concerns you've heard can be resolved.

I appreciate your attention.

Questions/Comments for TDEC on the Draft Small MS4 General Permit

Submitted on behalf of Knox County Engineering and Public Works 4/26/22

Construction Site Stormwater Runoff Control Questions

1. In Section 4.2.4., page 29, item g.: Please clarify the meaning of “*receiving and considering comments*”. How does TDEC intend the MS4 to show that they are “*considering comments*”?

Post Construction/Permanent Storm Water Management in New Development and Redevelopment Questions

1. Please add a definition for “Stormwater Control Measures (SCMs)”, specifically covering how the term pertains to section 4.2.5 of the draft permit.
2. Are the requirements for SCMs established in this permit applicable to SCMs installed from the start date of this permit forward or are they to be retroactively applied to previously installed SCMs?
3. Section 4.2.5.2, page 33, item b. Please clarify “information relevant” and “readily available” in the following statement: “*Information relevant to identified SCMs should be made readily available.*”
4. Section 4.2.5.2, page 33, item b.: Please define “Significantly limit” as it pertains to the following statement: “*If the permittee decides to significantly limit the number of SCM options it must be documented in the stormwater management program how the performance standards of Tennessee Rule 0400-40-10-.04 can be met with the limited set of control measures that are allowed.*”
5. Section 4.2.5.2, page 33, item c.: Please define “*Uncontaminated roof runoff*”.
6. Section 4.2.5.4., page 36, Please add the following definitions in the permit: “*establish*”, “*protect*”, and “*maintain*”, specifically covering how those terms pertain to water quality riparian buffers.

Education and Outreach on Storm Water Impacts & Public Involvement/Participation Questions:

1. Please define “*activity*” as it pertains to the minimum number of activities the MS4 must conduct each reporting year (Pare 15; Section 4.2.1.1 & other sections)
2. What level of involvement distinguishes collaborating from sponsoring in a MCM1/MCM2 activity? Is collaboration between 2 or more MS4’s considered a sponsored event?
3. Please explain the differences between “Public Education and Outreach”, and “Public Involvement/ Participation”.
4. Knox County administers an Adopt-A-Stream program with multiple unique creek clean up events conducted throughout the year; we consider each Adopt-A-Stream event to have multiple *activities* within it, a *Public Education and Outreach “activity”* and a *Public Involvement/ Participation “activity”* each achieving multiple management measures. Can one event have multiple “*activities*” within it and thus achieve the requirements of both *Public Education and Outreach* and *Public Involvement/ Participation* as discussed in section 4.2.1 & 2.2.2?

5. Is tabling at an event where the public are invited to participate in an aspect of the SWMP considered a *Public Education and Outreach* activity, a *Public Involvement/ Participation* activity or both?
6. On Page 20 (4.2.2) the Annual report requirement asks for “% of comments received from the public on construction site projects”. What is the denominator used to find this percentage? Please clarify this requirement or consider removing the requirement.

Illicit Discharge Detection and Elimination Questions

1. Comment about Section 4.2.3, Page 24, # 7: All septic system failures in Knox County are given 30 days to respond to the health department’s notice, therefore all septic system failures that constitute a MS4 illicit discharge will be required to have a “*Corrective Action Plan*”. Is this TDEC’s intent?
2. Section 4.2.3, Page 24, # 7: Please define “*Corrective Action Plan*”
3. Section 4.2.3, Page 24, # 7: If an owner/operator does not provide a corrective action plan even when required by the MS4 what course of action does TDEC require the MS4 to take?
4. Section 4.2.3, Page 24, # 7: Please explain what is meant by the last sentence in this section “*The ERP shall include remedies to address failures by the owner/operator to complete the corrective action plan and eliminate the illicit discharge.*” Does TDEC intend the MS4 to enforce the corrective action plan and the MS4 to also eliminate the illicit discharge if the owner/operator fails to do so?
5. Section 4.2.3, Page 24, d.: Please define “*Significant*” as it pertains to this section.
6. 4.2.3 Page 25: Please elaborate on how to comply with the annual reporting requirements of “% of non-stormwater discharges or flow investigated as a significant contributor of pollutants to the MS4”. What denominator is used to find this percentage? Also please define “*significant*” as it pertains to this section.

Pollution Prevention/Good Housekeeping Questions

1. Section 4.2.6 Page 43, third paragraph: Please add a definition for “*in a timely manner.*”

Monitoring Questions:

1. Section 4.6.1.1.1 On Page 55 the draft states “*Adopt existing survey protocols such as the ones available through the Natural Resources Conservation Service, State of Maryland Department of Natural Resources, and/or the State of Tennessee Habitat Assessment Protocol and related Stream Survey Field Sheets; or...*”. **Please provide references to the survey protocols listed here.**
2. Section 4.6.1.1.1 on page 55 the draft states that the permittee may Develop their own protocol which must address 14 Visual Survey Assessment elements: (*Channel Condition, Hydrologic Alteration, Bank Condition, Riparian Area Condition, Canopy Cover, Water Appearance, Nutrient Enrichment, Animal Or Human Waste Presence, Pools, Barriers, Fish Habitat Complexity, Invertebrate Habitat, Invertebrate Community, Riffle Embeddedness, Other as defined by the permittee*) **Must all 14 elements listed above be assessed in each stream?**
3. Section 4.6.1.1.2 on page 56 please clarify the statement (item e.) “*Utilize Division protocols identified above in Option 1 or protocols approved by the Division for instream monitoring.*” Which protocols in option is TDEC referring to?

4. Please clarify Section 4.6.1.1.2 on page 57 item h: *“Provisions for an administratively continued small MS4 general permit.”* If the MS4’s monitoring plan is for one permit cycle could the provisions for an administratively continued permit be “ensure the monitoring is complete for the permit cycle”?
5. Please provide a definition for *“wet weather screening”* as it pertains to section 4.6.2 item b. (Page 59).

Mary Halley's Comment Topics for TDEC Public Hearing – April 26, 2022

My name is Mary Halley. I'm a Senior Associate Consultant working for Wood Environment and Infrastructure Solutions in Knoxville Tennessee. I've worked in municipal stormwater management consulting since the late 1990's. My career since 2003 has been providing MS4 permit consulting services to both large and small MS4s, both in Tennessee and throughout the United States east of the Rocky Mountains. I have extensive experience with Tennessee MS4 permits and permittees.

Tonight, I will speak on 4 issues in the draft permit I feel are most impactful to small MS4 permittees. I appreciate the opportunity to be heard tonight.

1. **Documentation and reporting** – The level of documentation, tracking, and reporting on compliance activities in the draft permit is significantly increased compared to past permits. It is my understanding that some of this is due to the remand rule, which was explained in the last hour. My thoughts on this change are as follows:
 - a. This shifts the focus of stakeholders, including TDEC and permittees, away from compliance based on BMP quality and effectiveness to compliance based-on activity reporting, tracking, and accounting
 - b. To many permittees, what the draft permit includes for documentation and reporting is NOT as simple as prompting a new query in a database. Depending on their resources, permittees use a variety of documentation, tracking, and reporting tools – from hard copy logbooks, to spreadsheets, to MS4-focused software, and municipal asset management software. Based on my experience, I'd say that very few permittees have access to reporting focused software. Very few, if any, are single tool that addresses every BMP. BMP reporting is also done by a wide variety of municipal staff in different departments. In addition to all of this, most permittees are NOT tracking BMPs to the level and degree of specificity of the draft permit. Thus, the draft permit's requirements translate to a considerable increase in administrative burden placed on permittees for the purpose of compliance BMP accounting and paperwork, rather focusing on the work of BMP effectiveness and water quality protection.
 - c. Many permittee programs are underfunded already. Getting and sustaining additional funds to provide resources for permit accounting, reporting, and documentation will be difficult at best.
 - d. I suggest TDEC revisit the draft permit, looking for areas of documentation redundancies (there are many), and needless specificity in activity tracking and reporting.
 - e. In addition, there are no timeframes for implementation of increased documentation and reporting requirements, implying these requirements are to be met within the permit's first year. I suggest the draft permit be revised to give permittees ample time to modify their programs and implement changes or addition to documentation, tracking, and reporting methods. Judging from the level of paperwork discussed in the draft permit, this will require at least 3 fiscal years (1st to budget, 2nd to plan & budget, 3rd to implement). However, I suggest TDEC provide the entire five-year permit period, with gradual annual increases in documentation and reporting requirements.
2. **Public education & outreach and Public Involvement/Participation** – The level of effort required of permittees for these two control measures is increased significantly in the draft permit when compared to past permits, especially for permittees with populations greater than 25,000.
 - a. This shifts the focus of TDEC and permittees away from public education and public involvement activity quality and effectiveness to the # of activities and how they are reported. I'd be interested to know how TDEC came up with these numbers.

Population	Annual PIE Activities	Annual Pub Inv. Activities
≤ 25,000	4	4
25,001 and 50,000	9	9
> 50,000	15	15

- b. There is no question that public education and public involvement is a critical component of stormwater pollution prevention and water quality protection. These control measures can go a long way in preventing nonpoint source pollution in the first place and reducing the need for enforcement of permittee stormwater requirements. With regards to these control measures in the State of Tennessee, my observations as an experienced municipal stormwater consultant are two-fold:

- First, generally speaking, Tennessee permittees should and could do a better job of focusing on these control measures as important features of their compliance programs. That is not to say some Tennessee permittees don't have effective public education and involvement BMPs. Some do. But overall – Tennessee Ms4s are struggling to identify and implement a cohesive suite of BMPs. I believe this is primarily related to available funding/resources at the local level, and traditional “norms” of elected officials that engineering and public works departments shouldn't be doing anything other than engineering and public works. That is, they aren't sold on the need to emphasis education and involvement.
- In the past, TDEC has not pushed permittees to improve the quality and effectiveness of their BMPs for these control measures. Neither through the MS4 permits to date, nor through audits and enforcement. There has been no carrot or stick to move permittees in the direction of implementing effective public education and public involvement activities.

So, in Tennessee, we are where we are with respect to these control measures. However, the draft permit does nothing to improve either of those issues. A higher number of activities may translate into a clear path for compliance and enforcement by TDEC. It's just about accounting for the numbers. But it does not necessarily translate to improved quality and effectiveness of BMPs. I know this through my own experience as a consultant.

- c. Instead of just “upping” the number of activities for these control measures, TDEC should write and enforce a permit that places emphasis on public education and public involvement activity content, quality, and effectiveness. This will ensure that these two control measures are given the consideration they are due, and that permittee's will spend their time and resources on quality activities rather than just checking boxes.

3. **Uncontaminated Roof Runoff** – The sentence allowing permittees to exclude uncontaminated roof runoff from the WQTV must be deleted from the draft permit.

Scientific data is generally limited and does not support the position that roof runoff is uncontaminated (i.e., contains no other substances than rain/storm water). Common sense does not support the position that roof runoff is uncontaminated. Wind, air, birds, and even sometimes the roofing materials themselves, are sources of contaminants. A roof may have few pollutants during one storm event, but a flock of birds flies over it, and it could discharge a considerable level of pollutants in the next storm event. In some areas, rainfall itself is contaminated.

Throughout the comment and adoption of the recent Tennessee Rule, TDEC has defended this sentence verbally by stating that the sentence is permissive, meaning the permittee can choose to exclude uncontaminated roof runoff or not. However, this is a very short-sited view and places ownership of a big problem in the hands of the individual permittees themselves. Creating a permissive authority for this particular issue causes undo complexity at the local level to defend the issue.

- a. First, it places the responsibility of defining uncontaminated roof runoff on the permittee, without the safety of permit coverages for these discharges, a precedence for similar exclusions from other permits in the state or country or a successful legal defense of challenge to such an exclusion, or a basis in science and engineering that allows permittees to confidently craft and qualify criteria for defining uncontaminated roof runoff.
- b. Second, even with these arguments against including this sentence in local programs, many permittees will not be able to withstand political pressure to allow the exclusion from land development stakeholders seeking to weaken local stormwater quality standards. As we have seen in recent years, such challenges are often decided by politics as opposed to scientific understanding, environmental permit compliance liabilities, municipal resource needs and balancing, or even water quality protection goals.
- c. Finally, many Tennessee permittees are small local governments who do not have the resources internally or through consultants to evaluate these types of issues clearly. They will copy and paste the permit's design standard right into their ordinance without really understanding the implications and liabilities of this particular statement. This is one of the most common mistakes I see MS4 permittees make, both in Tennessee and throughout the country. However, land developers do have the money to search through local ordinances and find the least expensive pathway to plan approval for their development. Just using Google, I've found that the average under roof square footage of one of the super dooper market big box stores is about 180,000 sq.ft. That's over 4 acres of rooftop. When this development comes to the small MS4 that copied and pasted the permit, it is highly likely the developer will be successful in eliminating their 180,000 sq. ft. rooftop from water quality treatment.

By including the sentence pertaining to uncontaminated roof runoff in the final permit, the Division will place permittees in jeopardy of allowing polluted discharges under the guise of a permitted non-point source discharges that will be difficult to defend.

4. **Water Quality Buffers** – Clarity is needed for several aspects of this portion of the permit.

The first sentence states that permittees must have requirements that “establish, protect, and maintain” water quality buffers. However, the remainder of the permit is a mashup of directive and permissive language that makes it difficult for permittees to understand exactly how to implement this requirement.

- a. The buffer widths in the draft permit are directive – and, I believe, easy to understand and implement. However, statements pertaining to buffer vegetation are permissive – predominant vegetation “should be” trees; remaining buffer “may be” herbaceous cover. These statements need to be aligned with and explicitly referenced to the definition of a water quality buffer to provide clarity and boundaries to their permissiveness. The same goes with permissive statements pertaining to land uses and

activities within the buffer. Explicitly reference with the buffer definition or bring the definition into the body of the permit to help permittees avoid conflicting buffer rules at the local level.

- b. During listening sessions and on one-on-one calls, TDEC has been asked by stakeholders to define or provide further explanation regarding the requirements for permittees to “protect and maintain” water quality buffers. Thus far, a clear answer has not been provided, although I have heard third-hand that TDEC does not believe buffers should be protected with the same intensity as SCMs, and that an easement will be sufficient to meet these requirements. However, looking at the definitions of these words:

Protect means “keep safe from harm or injury” and “preserve or guarantee by means of formal or legal measures”

Maintain means “cause or enable a condition to continue”

Thus, the requirement for permittees to “protect and maintain” water quality buffers means buffers must remain compliant with the permit’s definition of buffers (that is, specific widths, vegetation types, and limited uses) once they are established. So, for most local governments, an easement isn’t going to be sufficient. Similar to my earlier comment on uncontaminated roof runoff, TDEC’s lack of clarity on this issue creates difficulties for permittees. It is difficult to implement, fund, and defend local buffer requirements based on strong words in a permit that are weakly supported by TDEC. Permittees will be unlikely to implement protection and maintenance activities as they can be considerably resource intensive and unpopular. On the flip side, weak implementation of “protect and maintain” on the part of a permittee can create difficulties when landowners call to tattle on their neighbor who cut down their trees in the buffer.

TDEC could assist permittees greatly by either eliminating or further defining expectations for water quality buffer protection and maintenance.

From: Ariel Wessel-Fuss
Sent: Thursday, April 28, 2022 4:25 PM
To: Liz Campbell
Subject: FW: [EXTERNAL] Small MS4 Permit

From: jpatterson@stjohnengineering.com <jpatterson@stjohnengineering.com>
Sent: Thursday, April 28, 2022 3:36 PM
To: Ariel Wessel-Fuss <Ariel.Wessel-Fuss@tn.gov>
Subject: [EXTERNAL] Small MS4 Permit

Ariel,

I have a comment concerning the Draft Small MS4 Permit that I think the Division should consider. I see that the Division is proposing to change the Buffer Zone requirements to better line up with the CGP requirements. I applaud this change and have argued for this for some time. However, I think the Division should consider eliminating the current buffer zone requirements that are based on the size of the drainage area altogether. I just looked at an area within an MS4 that contains wetlands that would only require a 30' permanent buffer zone based on the size of the drainage area. If this MS4 were to adopt the new permit language then this area would require a 60' buffer zone because the wetland is located in a watershed designated as having unavailable parameters for sedimentation. I believe this discretion will be fairly common and will become a pressure point with the regulated community pressuring the MS4s not to adopt the new requirements or to go back to the previous requirements once the difference becomes apparent.

Thanks,

Jim Patterson, TN-QHP
St. John Engineering, LLC
923 Jackson Street
Manchester, Tennessee 37355
(931) 728-2638
jpatterson@stjohnengineering.com

From: Ariel Wessel-Fuss
Sent: Friday, April 29, 2022 3:15 PM
To: Liz Campbell
Subject: FW: Small MS4 General Permit Public Comment

MS4 Comment

From: Adam Meadors <ameadors@mtjuliet-tn.gov>
Sent: Friday, April 29, 2022 1:59 PM
To: Ariel Wessel-Fuss <Ariel.Wessel-Fuss@tn.gov>
Subject: [EXTERNAL] Small MS4 General Permit Public Comment

Ariel,

Thanks for taking some time to review comments for the new permit. I really like your approach for reorganizing the way the permit reads and the way you have it organized. My major comment are in Minimum control Measures 4.2.1.1, 4.2.1.2, 4.2.2.1, and 4.2.2.2. I hope the division would consider reducing the minimum number of activities conducted each year. I would suggest cutting activities in half or more. As an MS4 education and participation are valuable teaching tools but would dominate much of the time MS4's have during the week planning, securing and executing the events. With such a high number I fear other areas of our programs would suffer. Additionally more events require more funds and most MS4's are well into budget planning processes, and quite frankly did not see it coming and may not be able to fully comply in the first year. I do like the way that the permit is handling SCM inventory, and program management. For MS4's that don't have firm handle on SCM's this portion will take up a lot of manpower creating a program and researching historical files for information. Perhaps this is another reason to reduce the number of education and outreach events yearly.

Thanks,

Adam Meadors
City of Mt. Juliet
Stormwater