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Via E-mail: Vojin.Janjic@tn.gov ; water.permits@tn.gov

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Tennessee Department of Environment and Conservation
William R Snodgrass Tennessee Tower
312 Rosa L. Parks Avenue, 11th Floor
Nashville, TN 37243-1534

RE: Proposed National Pollutant Discharge Elimination System (NPDES) General Permit for Discharges of Stormwater Associated with Construction Activities

Dear Mr. Janjić:

The Southern Environmental Law Center (SELC), with Harpeth Conservancy, Obed Watershed Community Association, Protect Our Aquifer, Sowing Justice, and Tennessee Chapter Sierra Club, submits the following comments regarding the proposed issuance of the 2021 NPDES General Permit for Discharges of Stormwater Associated with Construction Activities (draft CGP), Permit Number TNR100000, by the Tennessee Department of Environment and Conservation (TDEC).

The draft CGP contains several changes from the 2016 NPDES General Permit for Discharges of Stormwater Associated with Construction Activities (2016 CGP) that result in a decrease in environmental protection, such as reduced inspection frequency and the inclusion of larger projects within general permit coverage. TDEC must reinstate the more protective provisions from the 2016 CGP in order to comply with the federal Clean Water Act's prohibition on backsliding, and to help prevent the pollution of Tennessee's waters. TDEC should also consider additional measures to prevent sedimentation and siltation pollution resulting from construction activities, such as a requirement for operators to open their stormwater pollution prevention plans (SWPPPs) to public comment.

We submit these comments to TDEC so that the draft CGP can be revised to provide greater protection for the waters of the state, for the benefit of the state's citizens. Stormwater runoff is a major threat to water quality across the nation, and Tennessee is no exception. Construction stormwater pollution contributes to urban flooding, increases the costs of treating drinking water, muddies the streams and rivers Tennesseans enjoy recreating and fishing in, and smothers the state's aquatic wildlife. Tennesseans have "a right to unpolluted waters," Tenn. Code Ann. 69-3-102, and TDEC may only issue permits that do not backslide in our progress towards achieving that right.

I. Background

Construction and development cause serious sediment and silt pollution, as stormwater from rainfall washes over the exposed ground and into nearby streets, storm sewer systems, and waterways. Stormwater runoff from construction sites contains not only sediment and silt but also nitrogen, phosphorus, metals, petroleum hydrocarbons, trash, debris, and other pollutants, as well as contributing to turbidity pollution.¹ Numerous studies show that construction sites can significantly increase pollutant discharges into surface waters, and there is often more stormwater runoff from construction sites than from agricultural, forested, and mature developed sites.² Due to the high concentration of sediment in construction site stormwater and the high volume of stormwater runoff, there is a significant amount of sediment that ends up leaving construction sites.³

When sediment discharge reaches surface waters, it can cause extensive damage. The negative effects of construction site stormwater discharges can last well beyond a single precipitation event or an individual construction site because the organic and inorganic material washed into the waterway can persist for long periods of time.⁴ Elevated sediment levels harm aquatic organisms, including plants, invertebrates, amphibians, and fish, by reducing photosynthetic activity, diminishing food availability, and burying habitat.⁵ The sediment causes organisms to relocate, become sick, or die, changing the overall composition of the aquatic community.⁶ Sediment impacts are especially harmful for threatened and endangered species because they are already at risk of irreversible decline.⁷ The extraordinary aquatic biodiversity in Tennessee is a natural treasure in our state, and water quality deterioration from sediment and silt puts that priceless treasure at risk.⁸

¹ U.S. E.P.A., *Environmental Impact And Benefits Assessment For Final Effluent Guidelines And Standards for the Construction And Development Category*, EPA-821-R-09-012 (Nov. 2009), https://www.epa.gov/sites/production/files/2015-06/documents/cd_envir-benefits-assessment_2009.pdf, (2009 Construction Stormwater ELGs EIA), 1-1.

² *Id.* at 2-3.

³ *Id.*

⁴ *Id.* at 2-5.

⁵ *Id.* at 2-11.

⁶ *Id.*

⁷ *Id.* at 2-23.

⁸ See, e.g., *DNA mapping begins a long road to recovery for endangered Tennessee fish*, NEWS CHANNEL 9 (Apr. 11, 2018), <https://newschannel9.com/sports/outdoors/dna-mapping-begins-a-long-road-to-recovery-for-endangered-tennessee-fish> (noting that Cumberland Darter is threatened by, among other things, “habitat degradation caused by runoff-born sedimentation”); Amy Beth Miller, *Building mussels: Fine-rayed pigtoe an endangered freshwater mollusk at home in Little River*, THE DAILY TIMES (July 4, 2021), https://www.thedailytimes.com/news/building-mussels-fine-rayed-pigtoe-an-endangered-freshwater-mollusk-at-home-in-little-river/article_f65973f0-5bea-5b14-b263-4d43d9757076.html (explaining how erosion and water pollution have disrupted mussel habitat); *Wildlife photographer captures incredible image of ‘hellbender’*, NEWS CHANNEL 5 NASHVILLE (Oct. 19, 2018), <https://www.newschannel5.com/news/wildlife-photographer-captures-incredible-image-of-hellbender> (reporting that hellbenders are “at great risk of disappearing” due to habitat degradation, particularly as

Excess sediment also affects human uses of surface waters, preventing Tennesseans from fishing and recreating in many rivers and streams throughout the state and forcing localities and government agencies to spend money on dredging and treatment. Sediment reduces the navigable depth and width of channels, leading to navigational difficulties and problems like grounding and shipping delays.⁹ To keep navigable waterways passable, the U.S. Army Corps of Engineers spends an average of \$572 million (2008\$) per year to dredge the waterways.¹⁰ Construction site stormwater pollutants like sediment affect the quality and cost of providing drinking water,¹¹ and can also alter the taste and smell of the water.¹²

Stormwater sediment pollution has negative effects on industrial water uses, “clogging intake systems at power plants and other industrial facilities” and increasing the rate at which hydraulic equipment wears out.¹³ Agricultural water uses can be impaired by sediment pollution; for example, irrigation water with excess sediment “can form a crust over a field, reducing water absorption, inhibiting soil aeration, and preventing emergence of seedlings,” as well as interfering with the proper functioning of irrigation equipment.¹⁴ Construction stormwater pollution also harms the recreational and commercial fishing industries, since it damages the overall aquatic ecosystem.¹⁵

According to TDEC, “[s]ilt is one of the most frequently cited pollutants in Tennessee waterways.”¹⁶ In 2014, sedimentation accounted for almost a quarter of the pollution in impaired rivers and streams in Tennessee.¹⁷ In that year, TDEC reported that over 18,170 lake or reservoir acres had been assessed as impaired by sediment and silt pollution, as well as over 6,200 miles of streams and rivers.¹⁸

“increased sedimentation – resulting from silt, dirt and other pollutants running into streams – has smothered the rock environments on which hellbenders depend”).

⁹ 2009 Construction Stormwater ELGs EIA, 2-25.

¹⁰ *Id.*

¹¹ *Id.* at 2-26.

¹² *Id.*

¹³ *Id.* at 2-27.

¹⁴ *Id.* at 2-27 to 2-28.

¹⁵ *Id.* at 2-29.

¹⁶ TDEC, *Tennessee Erosion & Sediment Control Handbook: A Stormwater Planning and Design Manual for Construction Activities* (Aug. 2012), https://tnepsc.org/TDEC_EandS_Handbook_2012_Edition4/TDEC%20EandS%20Handbook%204th%20Edition.pdf (ESC Handbook), iii.

¹⁷ TDEC, *2014 305(b) Report: The Status of Water Quality in Tennessee* (Dec. 2014), https://www.tn.gov/content/dam/tn/agriculture/documents/landwaterstewardship/wr_wq_report-305b-2014.pdf (2014 305(b) Report), 47.

¹⁸ *Id.* at 58, 60.



“Unstabilized construction site discharge”¹⁹



“Untreated construction site dewatering”²⁰



“Muddy water from construction”²¹



“Poor stabilization during construction”²²

As noted above, the accumulation of silt in waterways has substantial economic impacts, including increased water treatment costs, navigation impairments, and increased risk of flooding.²³ Many water properties are affected: siltation smothers the eggs and nests of fish, clogs the gills of aquatic wildlife, alters and degrades habitat, decreases oxygen in the water, accelerates eutrophication, and changes temperature patterns.²⁴ If construction sites are not properly stabilized, water quality in Tennessee is at risk.²⁵

Sedimentation and siltation from stormwater pollution, including construction stormwater runoff, also contributes to urban flooding, as sediment clogs up the storm drains for municipal storm sewer systems.²⁶ The natural capacity of streams, rivers, and reservoirs are decreased by

¹⁹ TDEC and the University of Tennessee Knoxville, *Tennessee Erosion Prevention and Sediment Control Training Program for Construction Sites*, <https://tnepsc.org/indexNew.asp>.

²⁰ *Id.*

²¹ *Id.*

²² 2014 305(b) Report, 71.

²³ *Id.* at 49.

²⁴ *Id.* at 49-50.

²⁵ *Id.* at 71.

²⁶ 2009 Construction Stormwater ELGs EIA, 2-28. See also U.S. E.P.A., *Preliminary Data Summary of Urban Storm Water Best Management Practices*, EPA-821-R-99-012 (August 1999), 4-2; 4-30, https://www.epa.gov/sites/production/files/2015-10/documents/usw_b.pdf.

sediment pollution, making overbank flow events more common and severe.²⁷ Stormwater sedimentation “can increase the severity of property damages to bridges, roads, farmland, and other private and public property from flooding,” and can make remediation of flood damage more expensive.²⁸ Unfortunately, the effects of climate change mean that extreme weather events causing flash flooding are only anticipated to increase in Tennessee, making urban flooding problems even worse.²⁹ There has already been an 18% increase in heavy rainfall days in the Southeast from 1986-2016 compared to 1901-1960.³⁰ Tennessee has already experienced numerous major flood events in recent years, causing enormous damage.³¹ Even during normal rain events, poor sediment control practices at construction sites can cause flooding and spread mud and debris across the land of nearby property owners.³²

The impacts on water quality resulting from construction stormwater will also increase as the state’s population and economy grow in size. Tennessee has experienced rapid growth and development in the past decade; in just one year, from July 1, 2018 to July 1, 2019, the population of Tennessee increased by almost 58,000 people.³³ The population is expected to increase exponentially within the next few decades, with a study from University of Tennessee’s Boyd Center for Business and Economic Research estimating that Tennessee’s population will grow by over 1 million people within the next twenty years.³⁴ Middle Tennessee is expected to experience the majority of the growth.³⁵ Tennesseans are already concerned that more intensive

²⁷ *Id.*

²⁸ *Id.*

²⁹ U.S. E.P.A., *What Climate Change Means for Tennessee*, EPA 430-F-16-044 (August 2016), <https://19january2017snapshot.epa.gov/sites/production/files/2016-09/documents/climate-change-tn.pdf>; Brittany Crocker, *The changing climate has made Knoxville hotter, wetter and more expensive*, KNOXVILLE NEWS SENTINEL (June 15, 2021), <https://www.knoxnews.com/story/weather/2021/06/16/buying-home-knoxville-rain-and-flooding-cause-damages/7383971002/>; Center for American Progress, *The Impacts of Climate Change and the Trump Administration’s Anti-Environmental Agenda in Tennessee* (May 1, 2020), <https://www.americanprogress.org/issues/green/reports/2020/05/01/484425/impacts-climate-change-trump-administrations-anti-environmental-agenda-tennessee/>.

³⁰ Tom Di Liberto, *Torrential spring rains lead to flash flooding around Nashville at end of March 2021*, NOAA CLIMATE.GOV (Mar. 30, 2021), <https://www.climate.gov/news-features/event-tracker/torrential-spring-rains-lead-flash-flooding-around-nashville-end-march>.

³¹ *Id.*; *With Flooding On The Rise, Tennessee Communities Confront The Costs Of Climate Change*, 90.3 WPLN News (June 10, 2021), <https://wpln.org/post/with-flooding-on-the-rise-tennessee-communities-confront-the-costs-of-climate-change/>.

³² *Neighbors concerned about runoff from construction site*, NEWS CHANNEL 5 NASHVILLE (Oct. 16, 2018), <https://www.newschannel5.com/news/neighbors-concerned-about-runoff-from-construction-site>.

³³ Adrian Mojica, *Five middle Tennessee counties seeing largest increases in population*, FOX 17 (May 21, 2020), <https://fox17.com/news/local/five-middle-tennessee-counties-seeing-largest-increases-in-population>.

³⁴ Adrian Mojica, *Study: Tennessee population to grow by over 1 million by 2040, half in midstate*, FOX 17 (Dec. 10, 2019), <https://fox17.com/news/local/study-tennessee-population-to-grow-by-over-1-million-by-2020-half-in-midstate>.

³⁵ *Id.*

development and more construction projects are causing flooding and pollution.³⁶ As people continue to relocate to Tennessee, construction will increase further; properly regulating construction activity is vital for the future of the state.

A more protective CGP will help protect Tennessee's waters even as the state continues to grow. Current and future residents of Tennessee deserve to have access to clean and clear water that is safe for drinking, swimming, boating, and fishing. Water pollution causes economic injury to the community due to loss of tourism, decreased commercial fishing, and lower property values.³⁷ To maintain a strong and healthy community, it is critical to protect the state's waters by strengthening the CGP requirements for construction activities.

II. Comments on back-sliding from the 2016 CGP to the draft CGP

The draft CGP contains several provisions that are less protective than the provisions in the 2016 CGP, in apparent violation of both state and federal law. These changes are described below. Under both the federal Clean Water Act and the Tennessee Water Quality Control Act, anti-backsliding requirements mandate that, with certain limited exceptions, limitations and conditions imposed in any new or reissued NPDES permit be at least as stringent as those in previous permits.³⁸ TDEC must either reinstate the more protective provisions from the 2016 CGP, or it must explain in its Rationale³⁹ how the modifications it proposes in the draft CGP fit into one of the exceptions to the anti-backsliding requirements, as detailed at 40 C.F.R. § 122.44(l) and Tenn. Comp. R. & Regs. 0400-40-05-.08(j).⁴⁰ If TDEC believes that the relaxed standards fall into the exceptions for water-quality based limits enumerated at 33 U.S.C.A. § 1313(d), again, TDEC must explain how, e.g., water quality standards will still be met even with the less protective standards.

³⁶ Caresse Jackman, *Homeowners across Middle Tennessee worry fast development is contributing to flooding*, NEWS 4 NASHVILLE (Apr. 29, 2021), https://www.wsmv.com/call_4_action/homeowners-across-middle-tennessee-worry-fast-development-is-contributing-to-flooding/article_4a653168-a911-11eb-8c28-9f31ede03d73.html; Don Dare, *Homeowner concerned with neighborhood water runoff*, WATE (May 11, 2021), <https://www.wate.com/investigations/homeowner-concerned-with-neighborhood-water-runoff/>.

³⁷ 2014 305(b) Report, 12.

³⁸ See 33 U.S.C.A. § 1342(o); 40 C.F.R. § 122.44(l)(1) (“[W]hen a permit is renewed or reissued, interim effluent limitations, standards or conditions must be at least as stringent as the final effluent limitations, standards, or conditions in the previous permit...”); Tenn. Comp. R. & Regs. 0400-40-05-.08 (“When a permit is renewed or reissued, effluent limitations, standards or conditions shall be at least as stringent as the effluent limitations, standards, or conditions in the previous permit...”).

³⁹ Throughout this letter, the “First Rationale” refers to the Rationale for the draft CGP released by TDEC on May 11, 2021, and the “Second Rationale” to the Rationale for the draft CGP released on July 6, 2021.

⁴⁰ Specifically, for Best Professional Judgment permit requirements, TDEC must explain how “the circumstances on which the previous permit was based have materially and substantially changed since the time the permit was issued,” how new information or technical mistakes justify a decreased standard of protection, or how these decreases in protection are otherwise permissible under federal law. 40 C.F.R. § 122.44(l). In the Second Rationale, TDEC states that inspection requirements in the draft CGP are based on Best Professional Judgment. Second Rationale, 4.

In either case, TDEC must additionally demonstrate how the permit revisions will not lead to water quality standard violations. 33 U.S.C.A. § 1342(o)(3). Given the many examples cited above of ongoing water pollution issues caused by construction stormwater discharge, and the likely increased usage of the CGP as development intensifies, the burden must be on TDEC to explain how less protective standards—such as larger site sizes for general permits, fewer inspections, removal of site assessment requirements for most sites, and less detailed SWPPPs—will somehow ensure that water quality standards is sufficiently protected.

A. Permit coverage should not be extended to sites greater than 50 acres.

The draft CGP expands general permit coverage to sites that disturb more than 50 acres at one time, making it significantly less protective than the 2016 CGP. In the 2016 CGP, TDEC required construction to be phased to keep the total disturbed area less than 50 acres at any one time. 2016 CGP, Section 3.5.3.1(k). Section 5.5.3.2 of the draft CGP states “[c]onstruction should be phased to keep the total disturbed area less than 50 acres at any one time” (emphasis added). Projects that will disturb more than 50 acres at a time, which used to require an individual NPDES permit,⁴¹ would be allowed general permit coverage with this change, and avoid the more rigorous scrutiny and public participation requirements of individual permits. Instead of retaining the prohibition, the draft CGP added five requirements that apply when the permittee chooses to disturb more than 50 acres at one time—requirements that used to apply more broadly to projects covered by the CGP, as described below.

TDEC offers no real explanation for this decrease in protection. In the Second Rationale, TDEC acknowledges “that a construction-phasing acreage limit of some kind can be protective of water quality,” and goes on to state that “the limit of 50 acres is based on best professional judgment, not on any specific scientific or technical basis.” Second Rationale, 6.5. Specifically, the initial “50-acre limit was intended to encourage construction phasing, the quick stabilization of disturbed areas, and reduce the number of storm events to which soils would likely be exposed.” *Id.* TDEC’s only justification for removing the 50-acre cap on general permit coverage is that it “has been challenged over the scientific, technical, and water-quality basis for implementation of a 50-acre limit,” and “[i]n practice, these individual permits have required significant resources from the Department and the permit applicant/permittee, without necessarily providing a greater benefit to water quality.” *Id.*

Although it may be more work for TDEC to process individual NPDES permits with the full public and notice process, that cannot be sufficient justification for jeopardizing water quality. Even if individual permit requirements do not “necessarily” provide greater benefits to water quality, they certainly provide more opportunity for public participation and careful

⁴¹ The 2016 only covered projects disturbing more than 50 acres at a time if those projects were for “linear construction,” such as roadways and pipelines, and only if certain other conditions were met. 2016 CGP, Section 3.5.3.1(k).

planning, and often impose greater disclosure requirements on permit applicants.⁴² Moreover, TDEC's reasoning that there must be an affirmative justification for requiring individual permits is backwards. The default is for individual NPDES permits, and general permits are only permissible when they won't threaten water quality. In developing permits, including general permits, TDEC is obligated to "determin[e] whether a discharge causes, has the reasonable potential to cause, or contributes to an in-stream excursion above a narrative or numeric criteria within a State water quality standard." 40 C.F.R. § 122.44(d)(1). Restrictions such as the 50-acre limit help ensure that activities covered by the permit do not have the "reasonable potential" to harm water quality.

As described above, stormwater construction flooding is a major problem in Tennessee, and making it even easier to get the less protective general permit is a step in the wrong direction.⁴³ In allowing general permit coverage for larger projects, TDEC is going backwards to a less protective standard than what previously applied. General permit coverage should not be extended to sites greater than 50 acres given the increased potential for erosion and sedimentation.

B. Inspections should not be reduced from twice weekly to once weekly.

One requirement for the draft CGP's expanded coverage to projects that disturb more than 50 acres is for twice weekly inspections—but in the 2016 CGP, twice weekly inspections are the baseline requirement for all projects. Subsection 3.5.8.1 of the 2016 CGP required certified individuals to conduct twice weekly inspections for all construction sites. The draft CGP drops that down to once weekly inspections. The only justification for this given in the Second Rationale is that the federal CGP only requires once-weekly site inspections. Second Rationale, 8.

The federal CGP does not set a ceiling on protection—it sets a floor. TDEC should use the federal CGP as a baseline, but then adapt to it to conditions in Tennessee. Given increasing severe rain events in the Southeast because of climate change, and the degree to which construction stormwater pollution is a problem throughout the state, a higher inspection frequency is fully justified; certainly, there is no reason to inspect even less frequently than the current standard. Many problems could arise within a week, making this change a major step backwards for water protection in Tennessee. For example, if a construction site fails to implement proper erosion prevention and sediment control practices and there is heavy or even

⁴² See *Sierra Club v. ICG Hazard, LLC*, No. CIV. 11-148-GFVT, 2012 WL 4601012, at *9 (E.D. Ky. Sept. 28, 2012), *aff'd*, 781 F.3d 281 (6th Cir. 2015) (noting that with individual permits, "the discharger must disclose all chemicals, wastestreams, and processes" in order to receive permit shield protection, but that for general permits, "the permitting agency bears the burden for understanding the pollutants that might be discharged and writing the permit with appropriate limitations").

⁴³ See, e.g., Caresse Jackman, *Homeowners across Middle Tennessee worry fast development is contributing to flooding*, NEWS 4 NASHVILLE (Apr. 29, 2021), https://www.wsmv.com/call_4_action/homeowners-across-middle-tennessee-worry-fast-development-is-contributing-to-flooding/article_4a653168-a911-11eb-8c28-9f31ede03d73.html.

moderate rainfall during the week, large amounts of sediment could flow into nearby waters before an inspector discovers the issue. To ensure problems are addressed and resolved as soon as possible, inspections should continue to be conducted twice weekly for all projects.

Additionally, the inspections should be more detailed. The draft CGP's Inspection Report Form is overly simplistic. Draft CGP, Appendix C. It only requires the inspector to check boxes that indicate whether the Erosion Prevention and Sediment Controls are functioning correctly. If the inspector checks "no," they are asked to describe it in the comment section, but no other guidance is given. Instead, the Inspection Report should ask targeted questions to ensure the inspector is conducting a thorough investigation and the permittee is following the correct procedures. "Yes" or "No" boxes fail to provide the necessary level of detail to ensure compliance with the CGP, as is necessary to ensure full protection.⁴⁴

C. TDEC should reinstate the requirement that sites disturbing less than 50 acres obtain a site assessment.

The draft CGP only requires site assessments for projects planning to disturb more than 50 acres at one time, per section 5.5.3.3. Previously, section 3.1.2 of the 2016 permit required site assessments for many smaller sites within 30 days of commencing construction.⁴⁵ TDEC offers no explanation for this decrease in oversight and protection. According to section 3.1.2 of the 2016 CGP, the purpose of the site assessment is to "verify the installation, functionality and performance of the EPSC measures described in the SWPPP." Site assessments also "determine if construction, operation and maintenance accurately comply with permit requirements." All of these factors are as relevant for a 45-acre site as a 50-acre one, and they create a baseline of protection by ensuring that the SWPPP is designed and implemented correctly.

Conducting site assessments is a crucial way to ensure the permittee is complying with the CGP. Without site assessments, it could take weeks or months to discover the SWPPP is inadequate. Despite the potential for serious damage to Tennessee's waters, the Second Rationale's only justification for eliminating this requirement for most sites is that "[s]takeholders have argued that the site assessment is a redundant and therefore unnecessary requirement." Second Rationale, 9. These "stakeholders" are not specified, but are presumably the regulated community, who have every reason to want TDEC to make CGP compliance less difficult. Since construction stormwater pollution persists throughout the state, it is difficult to believe that a serious problem with the 2016 CGP was that it was overly protective. Stating that

⁴⁴ For example, North Carolina's general NPDES permit for discharge of construction stormwater, NCG25, requires the inspector to include more detailed notes during inspection such as description of maintenance needs and indicators of stormwater pollution. Permit No. NCG250000, <https://files.nc.gov/ncdeq/Energy%20Mineral%20and%20Land%20Resources/Stormwater/NPDES%20General%20Permits/NCG250000-Permit-FINAL-20200925.pdf>, 18.

⁴⁵ Specifically, the 2016 CGP required site assessments for sites with outfalls draining 10 or more acres (or 5 or more acres if draining to Exceptional Tennessee Waters or waters with unavailable parameters). 2016 CGP, Section 3.1.2. For a revised CGP, TDEC should automatically require site assessments for at least these sites.

inspection requirements are “redundant” without further explanation is nonsensical; more inspections may be “redundant” in some sense, but they may still be necessary to ensure overall system reliability and make sure that serious problems are not missed.

Because conducting site assessments is not overly burdensome and inadequate SWPPPs can have an enormous environmental impact, TDEC must reinstate the 2016 CGP site assessment requirements in the draft CGP. Given the scope of the sediment pollution problem across our state, TDEC should also mandate that site assessment occur before construction begins, to ensure that the erosion prevention and sediment control measures outlined in the SWPPP are in place before any major rain event.

D. TDEC should retain requirements for the SWPPPs to include descriptions of post-construction stormwater control practices.

At Section 3.5.4, the 2016 CGP states that the SWPPP must 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, including a brief description of applicable State or local erosion and sediment control requirements.

Additionally, for projects discharging to waters impaired for siltation or habitat alteration due to in-channel erosion, the SWPPP must include a description of the increase in impervious surface area after construction. 2016 CGP, Section 3.5.4. In the Notice of Determination for the 2016 CGP, TDEC explains these requirements by noting that 40 C.F.R. § 122.26(c)(1)(ii) requires SWPPPs to include, among other things, “[p]roposed measures to control pollutants in storm water discharges that will occur after construction operations have been completed, including a brief description of applicable State or local erosion and sediment control requirements,” and “[a]n estimate of the runoff coefficient of the site and the increase in impervious area after the construction addressed in the permit application is completed, the nature of fill material and existing data describing the soil or the quality of the discharge.” 2016 CGP NOD, 15-16.

In the draft CGP, these references have been deleted. To justify this deletion, TDEC only states that “[p]ost-construction stormwater pollutants should not be regulated in the construction stormwater general permit, and the division cannot regulate stormwater volumes, only pollutants in stormwater.” Second Rationale, 8. As the federal regulations cited in the 2016 CCGP NOD have not changed, TDEC must explain why the federal regulations no longer require the SWPPP to include these elements.

E. TDEC should reinstate the requirement for operators to submit information to MS4s and comply with MS4 local ordinances.

The draft CGP eliminated the requirement for operators to submit information to municipal separate storm sewer systems (MS4s) and comply with MS4 local ordinances. The

2016 CGP required permittees to submit a copy of their notice of coverage under the CGP to their local MS4. 2016 CGP, Section 1.4.4. The Second Rationale for the draft CGP proposes this language for deletion, with the justification that “TDEC does not have the legal authority to enforce local ordinances under this permit.” Second Rationale, 6.3.⁴⁶ TDEC may not have the legal authority to enforce local ordinances generally, but it certainly has the authority to include compliance with local laws as a condition of its NPDES permit. For example, the 2017 EPA CGP includes a requirement for permittees to “[c]omply with state/local requirements” as part of the mandatory erosion prevention and sediment control practices. 2017 EPA CGP, 2.2.13.d. TDEC has not given any explanation for why this approach—which it seemed to believe was legally valid in previous permits—is no longer acceptable.

Additionally, although it is true that local jurisdictions must enforce their own ordinances, TDEC has not proffered any explanation for why it has decided to make it more difficult for them to do so by not requiring permittees to comply with the very simple step of submitting information to their local MS4s. The requirement to submit information to MS4s is not onerous and it makes it easier for localities to ensure that operators are in compliance with permit conditions. EPA regulations require most MS4s to develop, implement, and enforce their own stormwater regulations to prevent water pollution,⁴⁷ and as the state agency responsible for protecting the waters of the state, TDEC should help, rather than hinder, their efforts. TDEC must continue to require operators to submit the documents to MS4s, and make compliance with local stormwater ordinances a condition of CGP compliance.

F. TDEC should retain the qualification requirements to prepare SWPPPs for sites disturbing five acres or less.

TDEC has also relaxed a requirement for SWPPPs to be prepared by individuals with stormwater qualifications when sites are less than five acres. Section 3.1.2 of the 2016 CGP required site assessments to be performed by individuals with one or more of the following qualifications: (a) a licensed professional engineer or landscape architect; (b) a certified professional in erosion and sediment control; or (c) a person who has successfully completed the “Level II Design Principles for Erosion Prevention and Sediment Control for Construction Sites” course. Section 5.2 of the draft CGP removed these qualification requirements for sites less than or equal to five acres of disturbance, instead providing optional templates for SWPPP preparation.

TDEC has not provided an explanation for this change, even though it would seem likely to lead to less competent preparation of SWPPPs for these sites. Requiring that SWPPPs be prepared by individuals who are knowledgeable about erosion control practices and engineering is a basic safeguard in ensuring that the plans will actually prevent water pollution. For example, in the current version of EPA’s general construction stormwater permit, the provisions applying

⁴⁶ The First Rationale provided only the explanation that “[l]ocal jurisdictions are expected to enforce their own ordinances.” First Rationale, 5.3.

⁴⁷ 40 C.F.R. §§ 122.26(d)(2)(iv)(d) (for Phase I MS4s), 122.34(b)(4) (for Phase II MS4s).

to New Mexico require that “[a]ll SWPPPs must be prepared in accordance with good engineering practices by qualified (e.g. CPESC certified, engineers with appropriate training) erosion control specialists...”⁴⁸ Requiring experts to conduct inspections is not overly burdensome and is necessary to prevent stormwater pollution, so TDEC must reinstate this requirement for the draft CGP.⁴⁹

III. Other comments on the draft CGP

A. Members of the public should have the opportunity to comment on SWPPPs.

The draft CGP fails to provide the public an opportunity to comment on the SWPPPs of individual projects covered by the CGP. Public participation is a critical component to achieving the goals of the Clean Water Act. 33 U.S.C. § 1251(e). The SWPPPs are the main mechanism by which the goals of the CGP are enacted, and each project covered by the CGP must submit its own SWPPP. Without an opportunity for comment, the public is prevented from providing valuable feedback to the operator and TDEC about whether a particular SWPPP in a particular location will be adequately protective.

Courts have held that public comment is required for plans required under similar permitting schemes. In *Waterkeeper All., Inc. v. U.S. E.P.A.*, 399 F.3d 486, 503–04 (2d Cir. 2005), for example, the Second Circuit held that a federal rule concerning confined animal feeding operation permits did not meet the Clean Water Act’s public participation requirements, in part because under the rule the public did not have the ability to scrutinize or comment on the nutrient management plans which set best management practices to prevent pollution. The court found that the rule “deprive[d] the public of its right to assist in the ‘development, revision, and enforcement of ... [an] effluent limitation,’” and from “calling for a hearing about—and then meaningfully commenting on—NPDES permits before they issue.” *Id.* (citing 33 U.S.C. § 1251(e)). See also *Env’t Def. Ctr., Inc. v. U.S. E.P.A.*, 344 F.3d 832, 853 (9th Cir. 2003) (noting that for general MS4 stormwater permits, an “NOI is a permit application that is, at least in some regards, functionally equivalent to a detailed application for an individualized permit,” and so there must be some provision for public notice and comment on the NOI).⁵⁰ Although this case does not involve a general permit for construction stormwater discharges, the principle that

⁴⁸ U.S. E.P.A., *NPDES General Permit for Discharges from Construction Activities, Issued June 27, 2019 and Expires, Feb. 16, 2022*, https://www.epa.gov/sites/production/files/2019-06/documents/final_2017_cgp_current_as_of_6-6-2019.pdf (2017 EPA CGP), Section 9.4.1.

⁴⁹ In the Notice of Determination for the 2016 CGP, TDEC seems to acknowledge that expanding site assessment preparation requirements to allow people who have taken erosion prevention and sediment control courses, rather than only allowing professional engineers and landscape architects to do so, is already a permissive step to decrease burden on permittees. 2016 CGP Notice of Determination, 11.

⁵⁰ In the 2016 Final MS4 General Permit Remand Rule, EPA codified the holding of *Env’t Def. Ctr., Inc. v. U.S. E.P.A.* by requiring that states choose between either fully setting out terms in the general MS4 permits or allowing public notice and comment on NOIs and stormwater management plans. <https://www.govinfo.gov/content/pkg/FR-2016-12-09/pdf/2016-28426.pdf>

SWPPPs and best management practices can functionally constitute effluent limitations, thus triggering a need for public notice and comment, still applies.

The draft CGP provides an opportunity for the public to comment on the general permit, but it does not allow the public to meaningfully contribute to each SWPPP. The draft CGP should allow public comment on the SWPPP. At minimum, SWPPPs must be available for public review,⁵¹ and conditions and limits in the draft CGP should ensure that NOIs and SWPPPs are not the “functional equivalent” of permit applications. For example, restricting general permit coverage to sites disturbing less than 50 acres at one time would require larger sites, which may have more particularized SWPPPs or the potential to cause more water pollution, to undergo the full public participation process mandated for individual NPDES permits.

B. TDEC should require NOIs be submitted before construction begins.

Section 3.1.3 of the draft CGP requires a complete application (which includes the NOI, SWPPP, and fee) to be submitted at least 30 days prior to commencement of construction activities. But section 3.1.5 contains a problematic loophole, stating that “[d]ischargers are not prohibited from submitting NOIs after construction at their site has already begun,” but that any prior, unpermitted discharges are subject to penalties. This language provides an opportunity to completely bypass the preferred application process, so long as the operator can claim that no unpermitted discharges occurred before they bothered to submit their NOI.

The draft CGP must require individuals to submit NOIs prior to commencing construction. Under the draft CGP, there is little incentive to submit NOIs before starting construction. It is extremely difficult to obtain evidence of prior, unpermitted discharges—particularly since no agency would be aware of the site and inspecting for them—so it is unlikely the individual will face any penalties or fines after filing a late NOI.

Additionally, there are no submittal deadlines mentioned in the draft CGP. An individual may submit the NOI one week after construction begins, or six months after construction begins, without penalty. The EPA CGP contains a table that lists NOI submittal deadlines.⁵² For example, an operator of a new site must submit the NOI at least 14 calendar days before beginning construction, and the operator of an “emergency-related project” must submit the NOI no later than 30 calendar days after commencing construction.⁵³ It is recommended the draft

⁵¹ Section 7.2 of the draft CGP requires permittees to maintain a copy of the SWPPP “at the construction site”, but does not specify that the SWPPP must be in a publicly accessible place; by contrast, the 2016 CGP required the SWPPP copy be located “at the construction site (or other local location accessible to the director and the public)”. 2016 CGP, Section 6.2. TDEC should revise this section to make sure that SWPPPs remain accessible to the public.

⁵² 2017 EPA CGP, Table 1.

⁵³ *Id.*

CGP include a similar table for easy enforcement. TDEC must impose a fine or penalty for late NOIs to discourage future late submittals.⁵⁴

C. TDEC should review NOIs and SWPPPs to ensure they are in compliance with the permit conditions.

To obtain coverage, the permittee must submit a complete application, which includes the NOI, SWPPP, and application fee, at least 30 days prior to commencing construction. Pursuant to section 1.4.1 of the draft CGP, “[t]he division may review NOIs and SWPPPs for completeness and accuracy and, when deemed necessary, investigate the proposed project for potential impacts to the waters of the state.” The Clean Water Act, 33 U.S.C.A. § 1342(b), allows states to distribute NPDES permits “only where, inter alia, the state permitting programs ‘apply, and insure compliance with, any applicable [effluent limitations and standards].’”⁵⁵ It is not enough that TDEC “may” review NOIs and SWPPPs—it “must” do so, to ensure that Tennessee waters are adequately protected from stormwater pollution.⁵⁶

The Ninth Circuit has stated that “[s]tormwater management programs that are designed by regulated parties must, in every instance, be subject to meaningful review by an appropriate regulating entity to ensure that each such program reduces the discharge of pollutants to the maximum extent practicable.”⁵⁷ The draft CGP itself seems to acknowledge this need for review; the limitation on coverage for discharges threatening water quality states that discharges “the director determines will cause or has the reasonable potential to cause or contribute to violations of water quality standards” are not authorized by the permit, thus contemplating some level of review. Draft CGP, Section 1.3(d).

TDEC must review every NOI and SWPPP to ensure compliance with the permit prior to issuing notices of coverage. Without a thorough analysis of NOIs and SWPPPs, TDEC may approve a deficient application resulting in environmental harm.

⁵⁴ TDEC may impose administrative penalties for, among other things, the violation of “any other provision of this part or any rule or regulation promulgated by the board.” Tenn. Code Ann. § 69-3-115(a)(1)(H). TDEC regulations require that for general permits, “notices of intent shall be submitted in accordance with timeframes established in the applicable general permit.” Tenn. Comp. R. & Regs. 0400-40-05-.05(5). It is therefore within TDEC’s authority to impose fines on a permit applicant for failing to file a NOI within the timeframe established in the general permit.

⁵⁵ *Waterkeeper Alliance, Inc. v. U.S. E.P.A.*, 399 F.3d 486, 499 (2d Cir. 2005).

⁵⁶ TDEC’s duty to review NOIs and SWPPPs for compliance is even more pronounced since the proposed permit does not require permit applicants to inform MS4s of their construction plans. Under the draft CGP, TDEC refuses to facilitate the review of SWPPPs by MS4s by requiring applicants to submit information to those MS4s, and also denies its own obligation to review those SWPPPs itself. This creates an opportunity for seriously deficient plans to be implemented.

⁵⁷ *Env’tl. Def. Ctr., Inc. v. U.S. E.P.A.*, 344 F.3d 832, 856 (9th Cir. 2003).

D. Permit limits based on water quality standards should be more specific.

The draft CGP includes requirements to ensure compliance with the federal effluent limitation guidelines (ELGs) for construction stormwater.⁵⁸ Because compliance with the ELGs alone would not be sufficient to attain or maintain water quality standards, the draft CGP also includes requirements related to state water quality standards.⁵⁹ Draft CGP, Section 6.3. However, the draft CGP's requirements to ensure compliance with state water quality standards are not detailed enough to protect water quality. Section 6.3.1 states only that "[t]his permit does not authorize stormwater or other discharges that would cause or contribute to a violation of a state water quality standard", and contains no actual guidance for permittees on how to make sure such discharges do not occur. Section 6.3.2 repeats state regulations on water quality standards, such as prohibitions on "distinctly visible solids" and on the discharge of suspended solids, turbidity, or color resulting in "objectional appearance."

These water quality-based limits do not give permittees adequate guidance on how to avoid pollution. In *Natural Resources Defense Council v. U.S. E.P.A.*, the Second Circuit held that the EPA violated the Clean Water Act in issuing a general permit that contained overly vague water quality limits very similar to the limits in the draft CGP. 808 F.3d 556 (2d Cir. 2015). The EPA permit required permittees "to control discharges 'as necessary to meet applicable water quality standards' without giving specific guidance on the discharge limits." *Id.* at 578. The court found that this standard was "insufficient to give a [permittee] guidance as to what is expected or to allow any permitting authority to determine whether a [permittee] is violating water quality standards," and that EPA "fail[ed] to fulfill its duty to 'regulat[e] in fact, not only in principle.'" *Id.* (citations omitted).

As currently written in the draft CGP, the water quality limits "in fact add nothing", even though they are meant to supplement the federal ELGs. *Id.* Narrative water quality-based effluent limits, including best management practices, are permissible when "[n]umeric effluent limitations are infeasible," 40 C.F.R. § 122.44(k)(3), but those limits must still be specific and

⁵⁸ These are described at 40 C.F.R. Part 450, and include, among other things, the requirement to develop erosion prevention and sediment controls and to design pollution prevention measures. Draft CGP, Section 4.1; section 5.

⁵⁹ The Second Rationale states that "[b]ecause the discharge of sediment to waters can cause pollution, the permit includes narrative water-quality based effluent limitations in addition to narrative technology-based effluent limitations." Second Rationale, 4. *See also* 33 U.S.C. § 1311(b)(1)(C) (requiring establishment of "any more stringent limitation, including those necessary to meet water quality standards, treatment standards, or schedules of compliance"); 33 U.S.C. § 1342(a)(1) (requiring NPDES permits to meet "all applicable requirements" under 33 U.S.C. § 1311); 40 C.F.R. § 122.44(d)(1)(vii)(A) (requiring permitting authority to develop water quality based effluent limits that ensure compliance with water quality standards); Tenn. Code Ann. § 69-3-108(g) ("permits shall include... [t]he most stringent effluent limitations and schedules of compliance, either promulgated by the board, required to implement any applicable water quality standards"); Tenn. Comp. R. & Regs. 0400-40-05-.04(1)(g) (prohibiting discharges that "will cause or contribute to the violation of water quality standards").

actionable.⁶⁰ For example, TDEC could add additional best management practices to address water quality, as it does in the draft CGP for the special circumstances of discharges into waters with unavailable parameters or Exceptional Tennessee Waters.⁶¹ Draft CGP, Section 6.4. Although those practices still fall short, they offer more guidance than a generic prohibition on violating water quality standards.⁶² The lack of genuine water quality-based limits in the permit is not ameliorated by TDEC's ability to notify permittees when discharges "contribut[e] to the impairment of a receiving stream despite complying with the SWPPP," or to require permittees to update their SWPPP "to eliminate further impairment." Draft CGP, 6.4.1. "The point of a permit is to prevent discharges that violate water quality standards before they happen"; that TDEC can take "corrective actions" after the fact is "not reassuring." 808 F.3d at 580.

The insufficiency of the water quality-based limits in the draft CGP is even more striking when considering the apparent lack of any monitoring requirements to ensure compliance with those limits. Monitoring to "assure compliance with permit limitations" is required by 40 C.F.R. § 122.44(i), but the draft CGP does not contain information on how permittees are meant to monitor their operations for violations of effluent limits.⁶³ In addition to revising the water quality-based permit limits to make them specific and actionable, TDEC should also include

⁶⁰ See 808 F.3d at 578 (stating that "[e]ven if determining the proper standard is difficult, EPA cannot simply give up and refuse to issue more specific guidelines" and citing *Am. Paper Inst., Inc. v. U.S. E.P.A.*, 996 F.2d 346, 350 (D.C.Cir.1993) as "articulating that, even if creating permit limits is difficult, permit writers cannot just 'thr[o]w up their hands and, contrary to the Act, simply ignore[] water quality standards including narrative criteria altogether when deciding upon permit limitations'"). TDEC has also not justified its reliance on best management practices or explained why numeric criteria are infeasible, simply stating without further explanation that "[t]he development of numeric effluent limitations has proven not to be feasible at the scale of this general permit." Second Rationale, 4. If numeric criteria are indeed infeasible, TDEC must offer detail on why that is the case.

⁶¹ A general statement prohibiting discharges that violate water quality standards cannot be understood as a best management practice in itself, because it does not "ensure compliance" and "is neither a practice nor a procedure." 808 F.3d at 579-580. The Second Rationale supports this understanding, as it describes "BMPs and buffers" as examples of permit requirements based on federal ELGs, and the "prohibition on objectionable color contrast" as an example of a permit requirement based on state water quality rules. Second Rationale, 5. If the best management practices in the draft CGP are meant to be both water quality-based limits and limits mandated by the federal ELGs, that is also not acceptable; it would make water quality-based limits entirely redundant, and TDEC has already determined that additional measures beyond the ELGs are necessary. *Id.*

⁶² For example, the requirements for SWPPPs to be designed to accommodate a 5-year, 24-hour storm event and enhanced riparian buffer zone requirements are good additions to help protect water quality, but TDEC still must demonstrate how it determined that compliance with these requirements will ensure that state water quality standards are not violated. Draft CGP, Section 6.4.

⁶³ Although a "Construction Stormwater Monitoring Report Form" is mentioned in Section 8.7, no such form is given in the permit's appendix, and instructions on how to use that form are not in the draft CGP itself. Inspection requirements to ensure that the SWPPP is being implemented correctly are not the same as monitoring requirements to ensure that water quality standards are not being violated; if TDEC means for the former to serve as the latter, it must justify that decision.

monitoring requirements for those limits.⁶⁴ TDEC could, for example, require permittees that discharge to impaired waters or Exceptional Tennessee Waters to monitor and report for sediment or turbidity, and set a benchmark criteria that would trigger a need for the permittee to establish additional best management practices if the criteria were exceeded.⁶⁵

E. Erosion prevention and sediment control requirements should be strengthened.

Section 4.1.2 of the draft CGP requires a 30-foot natural water quality riparian buffer for all streams and wetlands with available parameters adjacent to construction sites, to the maximum extent possible. The draft CGP should increase the required buffer to 50 feet so Tennessee's CGP is as protective as the EPA's CGP.⁶⁶ It is crucial to require buffer zones that are wide enough to protect the water because the buffers remove additional pollutants. At minimum, TDEC must remove the equivocal language allowing a less than 30-foot barrier if it is "not possible," unless TDEC is able to articulate what circumstances would allow a smaller barrier to meet the water protection standards for a NPDES permits.

Additionally, the definition of a buffer must consider the ground cover and slope of the land. A 30-foot steep slope lacking in vegetative groundcover may not be an effective buffer, but a 30-foot buffer on flat land with tall grass may be effective. Considering the ground cover and slope when calculating the required buffer for each permit will ensure the permit adequately protects the water surrounding the site.

F. Electronic reporting requirements and the ban on cationic polymers are improvements in the draft CGP, and should remain in the final permit.

The draft CGP does include some improvements on the 2016 CGP, such as the electronic reporting requirement and the prohibition on cationic polymers, which represent important increases in protection for the waters of Tennessee. The electronic reporting requirement will streamline the reporting process, making the collection and processing of data timelier and more accurate, as well as increasing TDEC's ability to share information with the public. The prohibition on cationic polymers is also a large step in the right direction, as these toxic chemicals contaminate the water and harm many aquatic organisms. These positive changes should be included in any final version of the CGP.

⁶⁴ See, e.g., *Nat. Res. Def. Council, Inc. v. Cty. of Los Angeles*, 725 F.3d 1194, 1207 (9th Cir. 2013) (noting that as a general matter, "an NPDES permit is unlawful if a permittee is not required to effectively monitor its permit compliance").

⁶⁵ An example of a similar requirement is at Section 9.4.3.2.j of the 2017 EPA CGP, setting additional conditions for the Pueblo of Sandia: "The Pueblo of Sandia may require the permittee to perform water quality monitoring for pH, turbidity, and total suspended solids (TSS) during the permit term if the discharge is to a surface water leading to the Rio Grande for the protection of public health and the environment."

⁶⁶ See 2017 EPA CGP Permit, Section 2.2.1 (The EPA CGP requires a 50-foot undisturbed natural buffer zone).

IV. Conclusion

Pollution from construction stormwater runoff is a massive and on-going problem in Tennessee, and there is reason to think it will only get worse. The draft CGP represents an unacceptable decrease in the level of oversight for construction activities, and the level of protection for Tennessee's waters. TDEC should withdraw the draft CGP and redraft it, using the 2016 CGP as the minimum baseline for protections, and then submit that revision for public comment. If TDEC is not able to complete this before the current permit expires, it should extend the 2016 CGP for another year to allow time for careful consideration and public involvement.

Thank you for the opportunity to provide these comments.

Sincerely,

A handwritten signature in black ink, appearing to read "Chelsea Bowling".

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