DEPARTMENT OF TRANSPORTATION

Office of Environmental Stewardship
395 John Ireland Blvd, Mail Stop 620
St Paul, MN 55155

March 3, 2023

Todd Smith
Municipal Division
Minnesota Pollution Control Agency
520 Lafayette Road North
St Paul, MN 55155

Hello Todd Smith,

The Minnesota Department of Transportation (MnDOT) appreciates the opportunity to provide comments on the draft 2023 Construction Stormwater General Permit. MnDOT is charged with building and maintaining a safe and efficient transportation infrastructure for the citizens of Minnesota. In doing so, we are also subject to the requirements of the Construction Stormwater General Permit, which can have a substantial effect on how we plan, build, operate, and maintain the transportation system.

MnDOT recognizes the need to conduct its work to protect water quality in compliance with the Construction Stormwater General Permit. MnDOT believes, however, that there are opportunities to clarify portions of the Permit. Enclosed please find MnDOT's comments requesting clarification to ensure the Permit requirements are practical, cost-effective, and reasonable. Some of our comments seek clarity for the purpose of updating our specifications and other contract requirements. Other comments ask for clarification to ensure that permit requirements are easily explained during the many trainings in which MnDOT participates. We hope that our comments will assist you in issuing a Permit that works toward our shared goal of protecting water quality while also allowing us to provide the safe and high-quality transportation infrastructure for which we are responsible. If you have any questions or need clarification regarding these comments, please feel free to contact Ken Graeve at 612-386-6101.

Sincerely,

Nicole Bartelt Digitally signed by Nicole Bartelt
Date: 2023.03.03 13:16:35 -06'00'

Nicole Bartelt
Acting Chief Environmental Officer &
Office of Environmental Stewardship Director

Enc: Attachment 1, MnDOT comments on the draft 2023 Construction Stormwater General Permit

MnDOT comments on the draft 2023 Construction Stormwater General Permit

Design factors (item 5.26)

This existing requirement requires multiple factors (such as precipitation, soil types, etc.) to be accounted for in SWPPP design, but it has always been unclear as to what this means. For example, when accounting for "the expected amount, frequency, intensity, and duration of precipitation (5.26b)," should the permittee rely on Atlas 14 data or estimates based on more current climate data? And should designers be calculating RUSLE style equations on the various exposed surfaces of a project or is it acceptable to use well established design standards for choosing erosion and sediment control practices? Will the MPCA publish guidance on how these factors are to be accounted for and incorporated into the SWPPP design; and what must be designed, documented, and implemented to meet this permit requirement?

Stormwater Management (item 7.2)

We appreciate the emphasis on managing stormwater. The updated wording in item 7.2 will hopefully reinforce the need to focus on stormwater in addition to BMPs.

We also propose defining stormwater management in Permit Section 25 to further emphasize the stormwater management process:

> *Stormwater management principles are design items and construction methods that control, manage, prevent, and isolate sediments and turbid flows from the movement of stormwater around and through the project. These principles are not only structural and estimated BMPs but also represent a process for construction activities to minimize the generation of sediments and other pollutants.*

Wildlife friendly products (item 7.3)

MnDOT began phasing out plastic netting over ten years ago and has not allowed plastic netting on construction projects since 2020. We appreciate the addition of item 7.3 to encourage permittees to use wildlife friendly products instead of plastic netting. However, we strongly encourage MPCA to prohibit plastic netting outright. In our experience utilizing on average one to two million yards of blanket per year the natural fiber netting is widely available and comparable in cost to plastic netting (when calculated as installed costs). Prohibiting plastic netting through the permit would enable vendors to reduce the number of duplicative products they have to inventory and would simplify compliance with other permits that require natural netting.

We also encourage MPCA to address the problem of microplastic pollution in this permit item. Degradable plastic netting and also some types of hydraulic erosion control products leave plastic fibers and fragments in the environment. These microplastics eventually contaminate the environment they were presumably intended to protect. MPCA leadership on this would facilitate a broader industry transition to more sustainable materials.

Steep slopes (item 8.3)

Requirements regarding steep slopes are discussed in item 8.3 but the reader has to turn to the definitions to see that steep slopes are defined as 1:3 or steeper (item 25.32). Including the definition in item 8.3 would improve readability.

14 day stabilization time frame in item 8.8 (formerly item 8.6)

New item 8.8 (formerly item 8.6) allows a 14 day stabilization time frame for ditches and swales farther than 200 feet away from discharge points. This seems to conflict with the 7 day stabilization time frame required by updated item 8.6 and current item 23.9. Please clarify.

Phasing to minimize concurrent area of disturbance (item 8.12)

The requirement to disturb no more land than can be effectively inspected and maintained is not new. But in light of the re-framing of Permit Section 7, we suggest that this requirement be moved to Section 7. Phasing to minimize concurrent area of disturbance currently appears in Section 8, which is largely concerned with structural or product-based practices, whereas it is really more of a stormwater management practice.

Stockpile perimeter control (item 9.9)

There is an overall convention in the permit to avoid references to specific types of best management practices. But item 9.9 specifically mentions silt fence. This is contrary to the requirements that the permittees design and implement an effective SWPPP. We suggest removing this reference to silt fence by deleting the words "silt fence or other" so that the line reads "…provide effective sediment controls at the base of stockpiles…"

Soil compaction (item 9.14)

Item 9.14 requires permittees to minimize soil compaction. This is often difficult or impossible on linear projects because of the narrow working conditions and the need for large amounts of construction vehicle traffic. We suggest adding language to allow permittees to mitigate compaction if it could not be avoided:

> *When compaction is not preventable, permittees must estimate the area for decompaction BMPs and implement practices to mitigate compaction.*

Monitoring dewatering (items 10.2, 11.9, & 11.12)

We agree that dewatering can be a source of sediment discharge if not monitored carefully. In our experience the highest risk for sediment discharge is at the beginning of dewatering when the system is being adjusted. Once the dewatering system reaches equilibrium there often is very little change over the remainder of the operation. Some situations require dewatering to continue for many days but monitoring every four hours

throughout these extended operations will yield diminishing returns on the effort once the system is running smoothly. Instead of monitoring every 4 hours, we propose the following monitoring frequency that focuses the effort more efficiently on the highest risk initial set-up period followed by a reduced frequency that fits realistically into construction site activity and takes advantage of daylight for photography purposes:

> *Visually check and photograph the discharge at the beginning of a dewatering operation and every hour thereafter until discharge has remained consistently clean for at least ½ day of operation. The permittee may then reduce monitoring frequency to once every 8 hours for the next 3 days. If discharge has continued to remain clean the permittee may reduce monitoring frequency to twice a day, every morning and evening, as part of a long-term dewatering continuous quality control program.*

We are also concerned with the difficulty of photographing water. It is often difficult to take a photograph of water that shows the clarity because the glare from the sun or sky masks the color of the water. It is even more difficult to take photos at night without the reflection from a camera flash or supplemental lighting interfering with the color of the water. We request that MPCA provides guidance explaining acceptable visual indicators of water quality and acceptable quality of photo documentation for water quality.

Sediment removal from areas adjacent to project (item 11.5)

We understand that the proposed change is to clarify that sediment discharges must be removed from adjacent land surfaces in addition to surface waters. We always strive to correct problems that our projects have caused, but there are situations in which a neighboring landowner does not want us to remove sediment deposited on their land. This is sometimes the case when the adjacent land is a row crop field. It is our understanding that this would be an example of "…unless precluded by legal, regulatory, or physical access constraints." Please clarify what is expected of a permittee in this situation and what type of documentation is needed to demonstrate that access has been denied or sediment removal is not wanted.

Exit controls (item 11.6)

Sediment on paved surfaces is often caused by construction traffic exiting the project and presents a high risk of discharge to storm sewers and eventually to surface waters. Inlet protection devices are not perfect, and their safety overflow feature adds to the risk of sediment discharge. This permit item already requires removing sediment from paved surfaces sooner than within one calendar day of discovery if the sediment creates a safety hazard. Because of the high risk of discharge from paved surfaces, consider also requiring more frequent sediment removal if needed to avoid sediment discharge. Our proposed edits would simply add the underlined words to the following sentence from item 11.6:

> *"…remove sediment from all paved surfaces within one calendar day of discovery or, if applicable, within a shorter time to avoid <u>sediment discharge or</u> a safety hazard…"*

Reduced inspection frequency for native vegetation establishment (item 11.11)

We were encouraged to see the reduced inspection frequency for the establishment phase of native plantings, but disappointed to read that it only applied to solar energy projects. MnDOT commonly plants native vegetation on our construction projects. Native seed mixes are standard on our backslopes, ditch bottoms, and stormwater treatment basins. We currently plant about 2/3 of our disturbed soil acres with native seed mixes and are working toward a goal to use native seed mixes on 75% of our permanent seeding. We use native vegetation in part because of the increased functionality it can provide for soil stabilization, stormwater management, and resilience to extreme weather. We do this despite the slower establishment rate of many native species. MPCA appears to recognize that the slower establishment is a worthwhile tradeoff for the enhanced long term benefits and that it merits some flexibility in permit compliance. We simply request that the reduced inspection frequency for native plantings be applied to all projects where native vegetation is used rather than being specific to solar energy projects.

Also, we assume that the terms "temporary vegetation" and "temporary uniform cover" refer to cover crops consisting of annual species. But this is merely an assumption. Please clarify what is meant by temporary vegetation and cover.

Protecting construction materials (item 12.2)

This item requires supplies to be covered to prevent contact with stormwater. It includes the term "building products," which implies materials used for vertical construction. Consider replacing the term "building products" with "construction materials" to be more inclusive of the types of construction that is covered under the permit.

Permit coverage termination on individual lots (item 13.6)

While this item applies to housing construction, it is of interest to MnDOT because of our role in providing training around the state. The phrase "temporary erosion prevention and downgradient perimeter control is complete" can have multiple meanings. This can be difficult to teach and interpret. Consider rephrasing this as follows:

> *"…structures are finished and ~~temporary erosion prevention and downgradient perimeter control is complete~~ <u>at the time of sale the erosion prevention and sediment controls are functional and in 100% compliance with the permit or have been removed because permanent cover has been established</u> and the permittee distributes the MPCA's "Homeowner Fact Sheet…"*

Photos of permanent cover for Notice of Termination (item 13.8)

Many of our projects are large and the soil types and vegetation conditions can vary considerably along the length of a large project. Photographs can be a good tool for accountability but the proposed wording of 13.8,

particularly the term “substantially similar,” leaves a lot of room for interpretation. Will you publish guidance explaining acceptable levels of photo documentation for sites of various sizes and acceptable documentation that the predominant plant species depicted are perennial rather than annual species?

Stormwater treatment on linear projects (item 15.9)

The permit allows some exceptions for treating the full water quality volume on linear projects. There are situations where finding the space for permanent stormwater treatment is difficult. However, sometimes there are also opportunities to provide more beneficial treatment on nearby projects where treatment is not required. A recent example occurred where a rural road project triggered significant treatment requirements but an urban road project adjacent to the first did not require treatment. Some of the treatment required on the rural project was built on the urban project because it would capture urban runoff that was potentially more polluted than the rural road runoff.

Please consider adding to item 15.9 to explicitly allow treatment on a nearby project under the same common plan of development if it will provide more environmental benefit than if it were built on the project that triggered the requirement for permanent treatment. Possible wording for the permit could read:

> *Permittees can build permanent stormwater treatment on other projects within the same common plan of development if the treatment on the other project will provide a greater environmental benefit. Stormwater treatment on the other project must be constructed prior to or up to two years after the project that triggers the requirement for permanent stormwater treatment.*

Stand-alone recreational trails not counted toward impervious surface totals (item 15.15)

The phrases “trails that are distinctly set apart from a roadway” and “alongside roadways” can be interpreted in many different ways. MnDOT and other road authorities are often reconfiguring road corridors in ways that reduce road pavement width, increase vegetated boulevard width, and align pedestrian/bicycle paths farther away from the road. This is intended to improve safety and encourage active modes of transportation (which are also less polluting). The resulting corridor looks quite different and the trail is distinctly set apart from the road surface. Please clarify what makes a trail sufficiently distinct from the roadway to not be counted toward the net impervious surface area.

Also, some permitting agencies such as Rice Creek Watershed District consider a reduction in treatment requirements for sidewalks and trails that are set apart from the roadway with a pervious buffer over five feet in width. This recognizes the stormwater treatment benefit of the grass filter strip and the tendency for these sidewalks and trails to behave more like an isolated or disconnected impervious surface. We request that MPCA exempt sidewalks and trails from the calculation of net new impervious surface area if they are separated from the road by a vegetated buffer of a significant width.

Undisturbed native soil below infiltration basins (item 16.12 & 16.17)

How does the MPCA define undisturbed native soil? Certain construction activities and heavy equipment traffic may be unavoidable prior to excavating an infiltration area to within 3' of final grade. Heavy equipment may also be needed to conduct the final excavation of an infiltration area. These activities can cause compaction of the in-place soil below the final grade. Soil corrections such as ripping are sometimes required to alleviate that compaction. Are either the incidental compaction or the soil corrections considered disturbances to that native soil? We request that MPCA define undisturbed native soils and explain what would qualify as a disturbance. If incidental compaction is considered a disturbance, we would also request that the permit allow ripping or other soil corrections to alleviate that compaction and restore function to the native soils.

Infiltration rates above 8.3 inches per hour (item 16.16)

It is common practice to construct infiltration basins in areas where the in-situ soils drain faster than 8.3 inches per hour. This is corrected by installing custom filter media on top of the in-situ soils that has been adjusted to reduce the infiltration rate to below 8.3 inches per hour. However, it is also common to have confusion about whether infiltration is even allowed in soils that drain faster than 8.3 inches per hour. Consider publishing guidance to explain (with diagrams) that infiltration is acceptable in fast draining soils as long as the filtration media installed on top achieves the target infiltration rate.