

18 July 2024

Mr. Stewart Comstock Maryland Department of Environment Water Science Administration 1800 Washington Blvd Baltimore, MD 21230 Via email to: Stewart.Comstock@Maryland.gov

Subject: Tentative Determination for the National Pollutant Discharge Elimination System

Municipal Separate Storm Sewer System Discharge Permit for the State Highway Administration (Permit No.MD0068276, 24-DP-3313,

Dear Mr. Comstock:

We represent the Friends of Sligo Creek (FOSC), a nonprofit volunteer group dedicated to improving Sligo Creek and its Watershed. Sligo Creek is in Montgomery County and Prince George's County, Maryland. Our watershed is part of the Anacostia Watershed and ultimately drains into the Chesapeake Bay. We take our role in contributing to the quality of the Anacostia Watershed and the Chesapeake Bay very seriously and have numerous programs in place to protect our Creek and its receiving waterways.

We are writing to submit the comments below on the Maryland Department of Environment's tentative determination to renew the MS4 Permit for the MDOT Maryland State Highway Administration. These comments are in addition to comments we joined along with other organizations, in support of the submission by Maryland Choose Clean Water Coalition.

FOSC is concerned that the renewed MS4 Permit for the State Highway Administration will fall short in key areas:

1. Winter salt application and chlorides. You should be aware that MDOT/SHA's salt application last winter was terrible for Sligo Creek (and thus the Anacostia Watershed and the Bay). Using IWLA SaltWatch test kits, our large and active citizen monitoring team measured chloride levels far exceeding toxic minimum thresholds on more than one occasion after roads that frame our watershed were treated for winter storms. Both

MCDOT and SHA's road salt practice on roadways in our watershed and private and other practice on surrounding impervious surfaces were most certainly all responsible for our excessive Sligo Creek chloride levels.

We do not know to what extent significant damage has been done to Sligo Creek and its receiving waterways by the excessive chloride levels. While there were no reports of immediate fish and/or salamanders kills (which we had experienced a few years earlier under similar excessive chloride application, thought to come from the Capital Beltway), it is hard to imagine that there have not been negative effects, given the high levels of chloride that were measured.

From other contemporaneous reports, it appears that excessive treatment occurred throughout Montgomery County, although we cannot verify this empirically.

Attached, for your information, is the letter FOSC sent MDOT/SHA after toxic chloride levels were measured in Sligo Creek. Our basic point is that the MDOT/SHA program in place falls woefully short of what should be done. We have suggested numerous areas which SHA should rethink and make improvements. We strongly urge that these improvements be reflected – if not required - in the Permit. If MDE – and SHA – are serious about addressing the chlorides challenge, it is not sufficient simply to continue implementing the MDOT SHA's Maryland Statewide Salt Management Plan without change.

2. Construction Sediment. The draft Permit does not sufficiently address the problem of sediment generated by road construction that ends up in our waterways. This is a huge problem for our watershed - and, we understand, many other watersheds in the State. While MDOT/SHA is not the only responsible party for construction-related sediment, it does have responsibility. FOSC's Water WatchDog Program often gets citizen reports of pollution generated by MDOT/SHA construction sites. By the time the reports are received, it is often too late to prevent sedimentation of our waterway and creek clean-up is problematic. We urge MDE specifically to address construction sedimentation in the Permit. The current system is not protecting our streams sufficiently. We have noticed, for example, that contractor training and knowledge could be significantly improved. In addition, daily on-site enforcement by a trained and skilled officer could prevent problems before it is too late.

3. Stormwater Management: The Role of Trees, Tree Canopy and Natural Stormwater Controls. MDE should recognize trees as natural stormwater management instruments, by including trees in its formulaic estimates of on-site stormwater management for specific projects. It is time to recognize this gold standard of stormwater management, rather than continuing to rely primarily on inferior technical solutions, as we have for too many years. A consensus of how to model this addition is well within our technical reach at this point. This comment applies to stormwater policy, not simply the MDOT SHA permit renewal.

4. Accounting. As the CCWC submission implies, fiscal accounting as currently applied falls short of analyzing the real cost of any proposed storm water management project. A broader accounting concept is needed, so that the true costs and benefits of a particular design are better understood. Without knowing the true costs, we will keep ending up with second- and third-rate storm water management and disappointing results.

5. Climate Change and Forecasts. We strongly agree with the CCWC comments that the assumptions and forecasts used to estimate key elements like precipitation and precipitation intensity should be updated in view of the likely breaks from recent history due to climate change.

Thank you for the opportunity to comment.

Sincerely,

Kit Gage Director of Advocacy Friends of Sligo Creek PO Box 11572, Takoma Park MD 20913 advocacy@fosc.org www.friendsofsligocreek.org

attachment: FOSC letter to MDOT/SHA

To: Chris Conklin, Director, MCDOT, and Jon Monger, Director, DEP CC: Richard Dorsey, Chief, Division of Highway Services, Frank Kingsley, Section Chief Pavement Management; Jeffrey Knutsen, Section Chief, Field Operations, MCDOT

Stan Edwards, Steve Shofar, DEP Matt Harper, Parks

Dear Director Conklin and Director Monger:

On behalf of the Advocacy Committee of the Friends of Sligo Creek, I am writing to bring to your attention the excessive salt application on roadways and parking areas in the Sligo Creek Watershed by MCDOT and SHA contractors during recent winter storm events.

Despite your program to reduce salt application, the opposite occurred. It is imperative for the environment and residents of Montgomery County that you analyze what went wrong and do better.

Here's what we saw:

- Our 20+ IWLA SaltWatch testers around Sligo Creek measured chloride levels well above toxic levels during and after recent storm events. Many of the chloride readings were even above 1000 ppm. (In the IWLA testing scale, anything above 231 is considered toxic.) Levels have come down, but many site readings are still in the poor or toxic range.
- We received over a dozen reports of specific excessive salt piles in our neighborhoods during or after recent winter storm events. From what we can tell, the neighborhood problems were grossly underreported. Many of our neighborhoods were very heavily treated. You can see some typical examples of excessive salt in our watershed in the photos below.
- FOSC's Water Quality team has been measuring high chloride levels at many of its testing sites.

Next Steps to Reduce Salt Application

1. Further improve the County's service request system so that excessive salt reported is picked up immediately, including on weekends and holidays.

During this year's storm events, FOSC requested the removal of specific excessive salt/salt piles through the County's Winter Storm Portal or MC311, based on reports we received. Because of our requests, one of MC311's basic service topics ("Dirt, Glass or Salt in the Street") was revised. Now, when people search for "salt", they can request

the removal of excessive salt. We thank you for this timely and much needed change, but more needs to be done. Most importantly, the County's Winter Storm Information portal (which is specifically targeted at issues arising during snow events) still only allows people to request more salt, not less. The salt removal service option needs to be added to choices for the customer.

As a result of our requests and MCDOT actions, a lot of excessive salt was removed from roadways. This was very encouraging – but it took several days as the problem occurred on a long weekend. While understandable from a manpower perspective, the sooner salt can removed, the safer for everyone and our fresh water. And, even despite these efforts by MCDOT, a lot of applied salt remained on our streets.

2. Reassess the equipment used to remove excessive salt.

I believe you used a street sweeper to remove some salt. But do you have the type of street sweeper that can remove salt? We understand that not all street sweepers - typically used in warmer months for dirt and other detritus - can handle salt or should.

4. Review contractor protocol and training - and make improvements.

The salt piles may well have been caused by spreader calibration error, poor applicator training and skill, and perhaps equipment used. Excessive salt has shown up on fairly narrow, winding or hilly streets (some with speed bumps), where a driver has to slow his speed and probably brake often. Salt piles were also left in areas where vehicles likely had to stop or slow when faced by people walking on a street without sidewalks, common in many of our neighborhoods. Treating our neighborhoods is not the same as treating Colesville Road or the Beltway.

A few years ago, we learned that if a driver doesn't correct for these conditions or have a system that automatically corrects, there are excessive salt problems. In these circumstances, the salt application apparatus may continue distributing salt without a change in rate if driving conditions change. Other salt dumps may have been due to sheer carelessness. Reviews of applicator and equipment certification also appear to be in order.

5. Revisit your Salt Management Plan: Suggested Issues for further Consideration

The County's Salt Management Plan doesn't seem to be working from an environmental point of view. We suggest additional issues to consider, including:

 Although it seems unlikely, can weather forecasting be improved with more resources added for more reliable localized forecasts? Conditions were very different in different parts of the lower County.

- Are there alternatives to salt brining and salt application? Are there other brines that would be as effective for safety yet not be as bad for the environment?
- Are there any natural or other barriers to salt treatment that can protect our waterways? For example, perhaps a salt-absorbing plant barrier could be added along Sligo Creek Parkway. Sligo Creek is very sensitive to salt treatment there. Sligo Creek also receives drainage from the heavily treated Beltway, Colesville Road and other SHA treated roadways. Is there anything that can be done to protect it?
- We have also seen that salt applicators other than MCDOT and SHA have contributed to the heightened chloride levels in Sligo Creek. The FOSC SaltWatch Team started to understand this last year, when chloride levels were surprisingly high despite the absence of winter storm events and treatment by MCDOT and SHA. The "little guys" (residents, parking lot managers, MCPS facility managers, shop owners) salt a lot – for understandable safety and liability reasons. While better education is important, are there better options you can give these salt treatment players?
- Do you know of research and better practices out there that can help the County do better?
- Can the County have its own SaltWatch team, where various waterways are routinely tested for chloride?
- Would having a chloride TMDL improve things, including directing focus and resources?

While MCDOT (and SHA) succeeded in keeping everyone safe during these winter events, they should and can do better to protect our environment, including our waterways. Salt is very harmful to our water quality, particularly aquatic life and natural environment surrounding of our waterways. As you may know, salt levels of our fresh waterways are rising, largely due to hardscape application for winter storm events. WSSC and other drinking water authorities do not filter for salt. Salt also erodes infrastructure and vehicles. The stakes of addressing this problem are quite high.

We urge MCDOT to take the practical steps described above, and, with DEP and Parks, seriously analyze what can be done. Salt management should be considered part of MCDOT's Environment and Climate Resiliency priority.

Perhaps more research is necessary, which might suggest that a conference featuring best practices and forward-looking steps plus enhanced data collection with counterparts from around the country – and the rest of the world - would be a useful start.

We will write SHA separately.

Thank you.

Kit Gage advocacy@fosc.org Chair, Advocacy Committee Friends of Sligo Creek (FOSC)

Cc: Anne Vorce, FOSC SaltWatch Elaine Lamirande, FOSC President

Evan Glass, Montgomery County Council Kate Stewart, Montgomery County Council

Some Excessive Salt Photos from Sligo Creek Neighborhoods This Winter









To: Chris Conklin, Director, MCDOT, and Jon Monger, Director, DEP CC: Richard Dorsey, Chief, Division of Highway Services, Frank Kingsley, Section Chief Pavement Management; Jeffrey Knutsen, Section Chief, Field Operations, MCDOT

Stan Edwards, Steve Shofar, DEP Matt Harper, Parks

Dear Director Conklin and Director Monger:

On behalf of the Advocacy Committee of the Friends of Sligo Creek, I am writing to bring to your attention the excessive salt application on roadways and parking areas in the Sligo Creek Watershed by MCDOT and SHA contractors during recent winter storm events.

Despite your program to reduce salt application, the opposite occurred. It is imperative for the environment and residents of Montgomery County that you analyze what went wrong and do better.

Here's what we saw:

- Our 20+ IWLA SaltWatch testers around Sligo Creek measured chloride levels well above toxic levels during and after recent storm events. Many of the chloride readings were even above 1000 ppm. (In the IWLA testing scale, anything above 231 is considered toxic.) Levels have come down, but many site readings are still in the poor or toxic range.
- We received over a dozen reports of specific excessive salt piles in our neighborhoods during or after recent winter storm events. From what we can tell, the neighborhood problems were grossly underreported. Many of our neighborhoods were very heavily treated. You can see some typical examples of excessive salt in our watershed in the photos below.
- FOSC's Water Quality team has been measuring high chloride levels at many of its testing sites.

Next Steps to Reduce Salt Application

1. Further improve the County's service request system so that excessive salt reported is picked up immediately, including on weekends and holidays.

During this year's storm events, FOSC requested the removal of specific excessive salt/salt piles through the County's Winter Storm Portal or MC311, based on reports we received. Because of our requests, one of MC311's basic service topics ("Dirt, Glass or Salt in the Street") was revised. Now, when people search for "salt", they can request

the removal of excessive salt. We thank you for this timely and much needed change, but more needs to be done. Most importantly, the County's Winter Storm Information portal (which is specifically targeted at issues arising during snow events) still only allows people to request more salt, not less. The salt removal service option needs to be added to choices for the customer.

As a result of our requests and MCDOT actions, a lot of excessive salt was removed from roadways. This was very encouraging – but it took several days as the problem occurred on a long weekend. While understandable from a manpower perspective, the sooner salt can removed, the safer for everyone and our fresh water. And, even despite these efforts by MCDOT, a lot of applied salt remained on our streets.

2. Reassess the equipment used to remove excessive salt.

I believe you used a street sweeper to remove some salt. But do you have the type of street sweeper that can remove salt ? We understand that not all street sweepers - typically used in warmer months for dirt and other detritus - can handle salt or should.

4. Review contractor protocol and training - and make improvements.

The salt piles may well have been caused by spreader calibration error, poor applicator training and skill, and perhaps equipment used. Excessive salt has shown up on fairly narrow, winding or hilly streets (some with speed bumps), where a driver has to slow his speed and probably brake often. Salt piles were also left in areas where vehicles likely had to stop or slow when faced by people walking on a street without sidewalks, common in many of our neighborhoods. Treating our neighborhoods is not the same as treating Colesville Road or the Beltway.

A few years ago, we learned that if a driver doesn't correct for these conditions or have a system that automatically corrects, there are excessive salt problems. In these circumstances, the salt application apparatus may continue distributing salt without a change in rate if driving conditions change. Other salt dumps may have been due to sheer carelessness. Reviews of applicator and equipment certification also appear to be in order.

5. Revisit your Salt Management Plan: Suggested Issues for further Consideration

The County's Salt Management Plan doesn't seem to be working from an environmental point of view. We suggest additional issues to consider, including:

 Although it seems unlikely, can weather forecasting be improved with more resources added for more reliable localized forecasts? Conditions were very different in different parts of the lower County.

- Are there alternatives to salt brining and salt application ? Are there other brines that would be as effective for safety yet not be as bad for the environment ?
- Are there any natural or other barriers to salt treatment that can protect our waterways? For example, perhaps a salt-absorbing plant barrier could be added along Sligo Creek Parkway. Sligo Creek is very sensitive to salt treatment there. Sligo Creek also receives drainage from the heavily treated Beltway, Colesville Road and other SHA treated roadways. Is there anything that can be done to protect it?
- We have also seen that salt applicators other than MCDOT and SHA have contributed to the heightened chloride levels in Sligo Creek. The FOSC SaltWatch Team started to understand this last year, when chloride levels were surprisingly high despite the absence of winter storm events and treatment by MCDOT and SHA. The "little guys" (residents, parking lot managers, MCPS facility managers, shop owners) salt a lot – for understandable safety and liability reasons. While better education is important, are there better options you can give these salt treatment players ?
- Do you know of research and better practices out there that can help the County do better ?
- Can the County have its own SaltWatch team, where various waterways are routinely tested for chloride ?
- Would having a chloride TMDL improve things, including directing focus and resources?

While MCDOT (and SHA) succeeded in keeping everyone safe during these winter events, they should and can do better to protect our environment, including our waterways. Salt is very harmful to our water quality, particularly aquatic life and natural environment surrounding of our waterways. As you may know, salt levels of our fresh waterways are rising, largely due to hardscape application for winter storm events. WSSC and other drinking water authorities do not filter for salt. Salt also erodes infrastructure and vehicles. The stakes of addressing this problem are quite high.

We urge MCDOT to take the practical steps described above, and, with DEP and Parks, seriously analyze what can be done. Salt management should be considered part of MCDOT's Environment and Climate Resiliency priority.

Perhaps more research is necessary, which might suggest that a conference featuring best practices and forward-looking steps plus enhanced data collection with counterparts from around the country – and the rest of the world - would be a useful start.

We will write SHA separately.

Thank you.

Kit Gage Chair, Advocacy Committee Friends of Sligo Creek (FOSC) Some Excessive Salt Photos from Sligo Creek Neighborhoods This Winter





