



CHESAPEAKE BAY FOUNDATION
Saving a National Treasure

October 28, 2019

Attn: Sean Furjanic
Department of Environmental Protection
Policy Office
Rachel Carson State Office Building
P. O. Box 2063
Harrisburg, PA 17105-2063
www.ahs.dep.pa.gov/eComment
Via e-comment

RE: Draft NPDES General Permit for Discharges of Stormwater Associated with Small Construction Activities (PAG-01): 49 Pa.B. 5642; published Saturday, September 28, 2019

Dear Mr. Furjanic:

On behalf of the Chesapeake Bay Foundation (CBF), we respectfully submit the following comments on the Department's draft NPDES General Permit for Stormwater Discharges Associated with Small Construction Activities (PAG-01).

CBF is a 501(c)(3) non-profit organization, founded in 1967. The organization's mission—carried out from offices in Maryland, Virginia, Pennsylvania and the District of Columbia—is to restore and protect the ecological health of the Chesapeake Bay, the nation's largest and one of its most vital estuaries. As such, and on behalf of our over 300,000 members and e-subscribers across the United States, we are very interested in matters that will impact the health of the Chesapeake Bay, the waters that feed into it, and the health of those who live and work within the Bay watershed.

Stormwater runoff is one of the largest sources of pollution to Pennsylvania rivers and streams, including those rivers and streams that drain to the Chesapeake Bay. Improperly managed stormwater from construction activities, regardless of the activity size, impacts Pennsylvania streams with nutrients, sediment, and other pollutants, decreases the physical, chemical, and biological conditions of streams, accelerates stream bank erosion and property loss, increases the frequency and intensity of flood events, reduces groundwater recharge, decreases the baseflow of streams, and contributes to the impairment of the Chesapeake Bay.

According to the Department's draft 2018 Integrated Water Quality Report, construction stormwater runoff is cited as the source of impairment for 161 miles of streams and over 3,300 miles of streams are impaired from development sites in the Commonwealth.¹

Utilizing information from Pennsylvania's Phase 3 Chesapeake Bay Watershed Implementation Plan (WIP3)² and the Chesapeake Assessment Scenario Tool (CAST)³ finds that between 2009 and 2018, Pennsylvania's total nitrogen and phosphorus loads to the Chesapeake Bay have increased by 685,599 and 6,528 pounds per year, respectfully. In order to achieve the WIP3, loads from developed areas must decrease nitrogen by 384,238 and phosphorus by 12,325 pounds between now and the end of 2025.

Furthermore, Pennsylvania's climate is changing. According to a 2015 study by the Pennsylvania State University⁴, by the middle of this century precipitation is projected to increase by 8 percent annually and by 14 percent during the winter. In fact, the states WIP3 predicts an additional 4,135,000 pounds in nitrogen and 141,000 pounds in phosphorus loads from Pennsylvania to the Chesapeake Bay due to climate change.

Given the above, it is critical that PAG-01 take the above into consideration so as to be a tool for the protection and restoration of local water quality and for advancing implementation of the WIP3.

I. Commendable features of the draft PAG-01

We want to commend the Department on some of the provisions within PAG-01. For example,

- *The requirement for onsite personnel to be properly trained and aware of the responsibilities under the PAG-01 should enhance the appreciation, understanding, implementation and maintenance of best management practices (BMPs) throughout the construction phase(s) of the project. We highly encourage the Department to partner with entities such as the International Association of Erosion Control in creating and delivering education to planners, engineers, contractors, Department and County Conservation District (CCD) staff, and others.*

¹ Draft Pennsylvania's Integrated Water Quality Monitoring and Assessment Report—2018. PADEP. <https://www.dep.pa.gov/Business/Water/CleanWater/WaterQuality/IntegratedWatersReport/Pages/2018-Integrated-Water-Quality-Report.aspx>

² Pennsylvania's Final Phase 3 Watershed Implementation Plan. PADEP. <https://www.dep.pa.gov/Business/Water/Pennsylvania%E2%80%99s%20Chesapeake%20Bay%20Program%20Office/WIP3/Pages/PAs-Plan.aspx>

³ Chesapeake Assessment Scenario Tool (CAST). <https://cast.chesapeakebay.net/>

⁴ Pennsylvania Climate Impacts Assessment Update. May 2015. The Pennsylvania State University, University Park. <http://www.depgreenport.state.pa.us/elibrary/GetDocument?docId=5002&DocName=2015%20PENNSYLVANIA%20CLIMATE%20IMPACTS%20ASSESSMENT%20UPDATE.PDF%20>

- *Excluding certain activities and discharges from the general permit.* Some examples of the exclusions include the construction, installation or repair of transmission pipelines, gathering lines or other large pipelines. We also commend the exclusion of discharges that are located within areas of known sinkholes or surface depressions, combined sewer systems and of any other waste streams.

II. Recommended enhancements to the draft PAG-01

CBF understands that the Department receives significant amounts of criticism by the regulated community and legislators to do more with less and more quickly, especially with permit reviews. However, it is essential that these pressures do not lead to reactions by the Department that jeopardize its mission, its duties under the PA Constitution, the environmental and human welfare.

Although the draft PAG-01 is limited in size and has impervious surface thresholds depending on the site and watershed conditions, the impacts of the construction and post-construction conditions could have profound and permanent impacts on local and regional water quality.

In 2012, the U.S. Environmental Protection Agency (USEPA) released a report on Pennsylvania's stormwater program.⁵ As part of that assessment, the agency determined that at the time of the analysis over 50 percent of the 2,871 construction general permits fall within Department regional offices that wholly or partially drain to the Chesapeake Bay. Assuming that many of the PAG-02 projects will eventually convert to PAG-01 permits, the potential impacts of PAG-01 to achieving and maintaining Pennsylvania's obligations under the Chesapeake Bay Total Maximum Daily Load⁶, is an important consideration.

Given the above, CBF does not believe the current draft PAG-01 is sufficient to address pollution from stormwater discharged from small construction activities as required under state and federal law. The major shortcomings of the permit include:

A. Administrative Issues

i. Need to update manuals in concert with the draft PAG-01

As with most things, science and technology advance and evolve over time and accordingly these manuals need to keep pace and be updated to ensure the practices are, in fact, the best management practices available at this time. Manuals, such as the Erosion and Sediment Control Program Manual (363-2134-008) and the PA Stormwater BMP Manual (363-0300-002) have not been updated in quite some time. ESPCM was

⁵ Summary Final Report Pennsylvania Stormwater Program Review. USEPA. May 25, 2012. https://www.epa.gov/sites/production/files/2015-07/documents/pa_sw_final_report_doc.pdf

⁶ Chesapeake Bay Total Maximum Daily Load. USEPA. <https://www.epa.gov/chesapeake-bay-tmdl>

last updated in 2012 with some modifications/corrections in 2015. The PA Stormwater BMP Manual has not been formally updated since its release in 2006.

CBF recognizes that the Stormwater BMP Manual is in the process of being updated, but in order to ensure a complete and up-to-date system of construction and post-construction stormwater planning, design, implementation, and permitting, the Department should adopt the practice of formally synchronizing the manuals and permit programs simultaneously.

Such an approach would ensure Pennsylvania's programs and standards incorporate prevailing planning, engineering, and scientific information while reducing potential inconsistencies and maximizing water quality benefits.

ii. Monitoring and reporting should be mandatory

Currently the draft PAG-01 only has monitoring "as applicable."⁷ It also states that the Department "may" require monitoring on TSS, turbidity or other pollutants.⁸ Given that this general permit is new for the Department and is based on prescribed BMPs that were modeled, it is vital that this first iteration of the general permit obtain real data and information via monitoring and reporting in order to determine whether it is, in fact, working as modeled. Expecting modeled BMPs to work perfectly in every scenario possible under this general permit is short-sighted. By requiring monitoring and reporting of the actual impacts will allow the Department to make adjustments for the next cycle and continue to improve upon the general permit.

iii. Pre-application meetings waivers should be limited, and pre-constructions meetings should be mandatory and at the site.

Although the draft PAG-01 indicates that pre-application meetings and pre-construction meetings are mandatory there is the caveat that they may be "waived by DEP/CCD, in writing."⁹ It is recommended that the pre-application meetings waivers only be used in the most necessary of situations, if at all. These meetings are important to ensure the applicant is, in fact, even eligible to apply under this general permit. Given that there is eligibility overlap, related to the size of the proposed earth disturbance, in PAG-02 and the draft PAG-01 the pre-application meeting can assist both the Department/CCD and the applicant which permit, if any, would be most appropriate. Further, the draft PAG-01 should include an explanation of this overlap and inform the applicant to consult with the Department/CCD to determine the suitable general permit.

As for pre-construction meetings, there should be no waiver provision and the meeting should always take place at the site, not by phone or a Department/CCD office. Again, this is critical to ensure that the site is meeting the eligibility criteria. This will allow the Department/CCD staff to visually see if the site is the appropriate size, does not have

⁷ Sample Permit, Part A. Section II (pages 21-22).

⁸ Sample Permit, Part A. Section II.H. (page 25).

⁹ For example, Fact Sheet, Scope (page 1).

obvious sinkholes or depressions, and any other necessary pre-existing issues. This will help ensure the modeled BMPs that would be installed and implemented on the site are appropriate.

iv. NOI should be required upon renewal and NOIs should be published in the *Pennsylvania (Pa.) Bulletin*.

CBF is concerned about the continuing coverage, without an NOI submittal and review, approved under the general permit. The draft PAG-01 Fact Sheet states that the “general permit coverage will continue as long as DEP reissues the General Permit and compliance with the General Permit is maintained.”¹⁰ Given that this is a new general permit it should be a priority of the Department to ensure that this general permit is functioning as planned. An NOI upon reissuance will allow the Department/CCD to reevaluate the applicant and site conditions.

Further, transparency and accountability decrease by not requiring an NOI for reissuance of a general permit and by not having the NOIs published in the *Pa. Bulletin*. By only issuing the approval of the general permit in the *Pa. Bulletin*, neighboring properties and others potentially impacted are precluded from expressing their concerns for the project and/or applicant prior to activities taking place. Given the Department’s/CCD decreased staff and resources, having the public assist through input during the review process and prior to permit approval can be a valuable tool.

B. Meaningful requirements are necessary to ensure that discharges do not individually or cumulatively have the potential to cause significant adverse environmental impacts

Chapter 92a. section 54(a)(7) states that the Department may issue a general permit if the point sources, among other things, individually and cumulatively do not have the potential to cause significant adverse environmental impact. 25 Pa. Code §92a.54(a)(7). Similarly, Chapter 102 section 5(m)(1)(v) states that for general permits, the Department must determine that the projects individually and cumulatively do not have the potential to cause significant adverse impact. 25 Pa. Code §102.5(m)(1)(v). This condition of issuing a general permit under the regulations is not limited to just adverse impacts to surface water but is meant to include other environmental impacts as well. The draft PAG-01 does little to ensure that this condition is met by the applicant prior to review and issuance of the general permit. In fact, the draft PAG-01 is completely silent on this condition.

i. Addressing “significant adverse environmental impacts”

Some factors to consider when satisfying this legal obligation include, but are not limited: the status of receiving waterbodies (e.g., physical, chemical, and biological conditions of impaired and nonimpaired streams), impacts to achieving/maintaining the load and wasteload allocations (LAs; WLAs) of an approved TMDL; indirect hydrologic

¹⁰ Fact Sheet, Scope (page 2).

connectivity from off-site discharges to waters of the Commonwealth (e.g., site discharges that flow to a waterbody via roadway swales); groundwater connectivity and quality; proximity and impact to source water and wellhead protection areas, other existing and proposed NPDES discharges or water withdrawers in the area (e.g., Hydrologic Unit Code 12) of the applicant.

It is recommended that the draft PAG-01 be revised to require more narrative and numerical analysis and information from the applicant in the NOI to show that the proposed activity will not cause or contribute to significant adverse environmental impacts, not just surface water impacts. Further, the Department should improve its review and approval process for this requirement so as to not violate the regulation as well as its duty under the Pennsylvania Constitution.¹¹

ii. Addressing cumulative impacts generally

Although the draft PAG-01 limits eligibility to size and has impervious surface thresholds, it does not quite cover the impacts of multiple “small” construction sites in a dense or concentrated area. Not all sites and locations are the same. An athletic field site for a rural school is much different than 5 individual parking lot sites in an urban setting. Further, the lack of cumulative review could also lead applicants to take advantage of the expediency of the PAG-01 by finding ways to conduct large projects, one small parcel at a time. The PAG-01 should consider the sites more holistically and less microscopically when considering their cumulative impact and therefore eligibility for a general permit.

iii. Excluding sites that discharge to impaired and/or Total Maximum Daily Load (TMDL) water from eligibility

The draft PAG-01 is silent, but for a small comment in the Fact Sheet, on the issue of impaired water, with or without a TMDL. The Fact Sheet mentions that the Department is not limiting discharges to impaired surface waters under the PAG-01 as the Department has evaluated the potential for small project sites to cause or contribute to surface water impairments and has concluded that the eligibility requirements to use PAG-01 “significantly reduce the possibility” of the discharge to cause or contribute to an impairment.¹² This claim is not supported in any other materials within the draft PAG-01, nor is there peer-reviewed academic research supporting this claim. The claim only states that it “significantly reduces the possibility,” but not prevent surface water impairment with any certainty. A construction site, regardless of site and thresholds, should be ineligible for general permit coverage and be required to undergo a site-specific stormwater analysis if it discharges to an impaired surface water with or without

¹¹ “The people have a right to clean air, pure water, and to the preservation of the natural, scenic, historic and esthetic values of the environment. Pennsylvania’s public natural resources are the common property of all the people, including generations yet to come. As trustee of these resources, the Commonwealth shall conserve and maintain them for the benefit of all the people.” Article I, section 27 of the Pennsylvania Constitution, *see also*, *Robinson Township v. Commonwealth*, 83 A.3d 901 (Pa. 2013); *Pennsylvania Environmental Defense Foundation v Commonwealth*, 161 A.3d 911 (Pa. 2017); *Center for Coalfield Justice v. DEP & Consol*, EHB No. 2014-072-B (August 15, 2017).

¹² Fact Sheet (page 8).

a TMDL. This is the only way to guarantee that there will be no cumulative impacts and it will not cause or contribute to an impairment.

C. Draft PAG-01 does not discuss the issue of off-site discharges of stormwater to non-surface waters.

The draft PAG-01 does not discuss off-site discharges to non-surface waters. Is it assumed that the prescribed BMPs will not cause a discharge off-site to non-surface waters? If so, this needs to be clarified and supported by peer-reviewed scientific/academic literature. If that's not the case and if the draft PAG-01 may lead to off-site discharges, then the Department has a duty to ensure that the applicant has obtained all necessary approvals as well as not allow an activity to occur under the general permit that may cause significant adverse environmental impacts. This duty is required under the draft PAG-01 language, regulations, Storm Water Management Act as well as common law.

The draft PAG-01 should be revised to require actual proof, to be included in the NOI, of an express easement by the landowner(s) in which an off-site discharge is proposed to occur. In the circumstances in which a common law easement exists, the draft PAG-01 should be revised to require proof within the NOI that such an easement exists, and that the applicant is not in violation of the common law easement, as further discussed below.

i. Draft PAG-01 Language

Throughout the draft PAG-01 package it states numerous times that no new discharges may be commenced under the general permit until the applicant has obtained all other state and local permits **and approvals** arising out of the earth disturbance activities reported in the NOI.¹³ These approvals may be in the form of an express written landowner easement to allow for an off-site discharge or an express written waiver of such. Regardless of the type of approval, it is clearly and expressly required *prior* to construction resulting in stormwater discharges granted by the general permit.

ii. Sections 54(a)(7) of Chapter 92a. and Chapter 102 section 5(m)(1)(v)

Further, Sections 54(a)(7) of Chapter 92a. and 5(m)(1)(v) of Chapter 102, as further described above, also explicitly prohibits the granting of a general permit if individually or cumulatively there is the potential to cause significant adverse environmental impacts. For these sections, environmental effects are not limited to surface water (quality or quantity) impacts. Activities where there is the potential for adverse impacts to land surrounding the permitted activity should not be issued the general permit.

Allowing for off-site discharges that impact another landowner's property may certainly have adverse environmental effects in the form of flooding, scouring, contamination of private drinking water and/or an exacerbation of nonpoint source pollution. This may cause a decrease of value in that landowner's property as well as economic impacts such

¹³ For example, Sample Permit, 4., page 3.

as loss of valuable soil and/or crops. The impacts can and should be mitigated at the beginning of the NOI process and not later after damage may already be done. By not requiring more express proof of an easement or evidence to indicate a lack of impact to the off-site landowner is in violation of regulatory sections cited above.

iii. Storm Water Management Act

Under the Storm Water Management Act, there is a duty by the applicant to implement measures that are “reasonably necessary to prevent injury to health, safety *or other property*.” 32 P.S. § 680.13 [emphasis added].¹⁴ These measures are to be consistent with the applicable watershed storm water plan. However, if a person engaged in the alteration or development of land which affects storm water runoff is not required to show that actions, such as an express easement provided by the impacted landowner of off-site discharges, how can the Department or County ensure that reasonable measures are being taken to prevent injury to other property? This lack of proof can potentially contradict the watershed storm water plan and ultimately cause a violation of the Storm Water Management Act.

d. Common Law Easements

Additionally, for applicants that may claim to have a “common law easement” for off-site discharges, the draft PAG-01 should require actual evidence that (1) a common law easement does, in fact, exist and (2) that it will not be violated under the common enemy rule exceptions. Generally, by way of a series of cases, under the common enemy rule, an upland landowner has the right to have surface water flowing on or over its land discharged through a natural water course onto the land of another, but cannot (or otherwise will be held liable) if the (1) landowner has diverted the water from its natural channel by artificial means; **or** (2) where the landowner has unreasonably or unnecessarily increased the quantity or change the quality of water discharged upon its neighbor.⁷ In order to establish this liability, an impacted landowner only needs to show that the applicant collected and/or concentrated surface water from its natural channel through an artificial medium and that the water was discharged onto the impacted landowner’s property in an increased volume or force, however, slight.⁸

¹⁴ Any landowner and any person engaged in the alteration or development of land which may affect storm water runoff characteristics shall implement such measures consistent with the provisions of the applicable watershed storm water plan as are reasonably necessary to prevent injury to health, safety or other property. Such measures shall include such actions as are required:

- (1) to assure that the maximum rate of storm water runoff is no greater after development than prior to development activities; or
- (2) to manage the quantity, velocity and direction of resulting storm water runoff in a manner which otherwise adequately protects health and property from possible injury. 32 P.S. § 680.13

The draft PAG-01 assumes to meet some of these measures above through the prescribed. However, these are not the exclusive list of measures that can be taken. The statute simply outlines actions that must be taken. Accordingly, more actions may be taken than those listed above to further prevent injury to health, safety or other property.

Landowners are at a huge disadvantage if they must confront development companies after damage is already done to their land by construction activities in which the permittee did not secure the appropriate easements or put in place measures to mitigate the off-site discharge and violated the common law easement. Requiring all the requisite proof of easements and/or additional information from the application at the time of the NOI will easily help protect landowners, property and the environment from negative impacts from off-site discharges and ensure that there are no violations with a common law easement. This is also beneficial to the applicant as it can prevent potential claims of trespass, negligence and harm by landowners impacted by an off-site discharge.

D. PAG-01 should prohibit the use of a general permit for construction sites which propose earth disturbance within 100 feet of waters of the Commonwealth. In such instances, an individual permit should be required

Research clearly documents that the land immediately adjacent to waterbodies has a profound impact on the physical, chemical, and biological integrity through direct interaction with soils, hydrology, and biotic communities.

To that end, we believe that for projects which propose earth disturbances that require an NDPES permit that are within 100 feet of waters of the Commonwealth, the use of a general permit should be prohibited. Permit applications which propose such earth disturbance should be required to obtain an individual permit, particularly within PA's Chesapeake Bay watershed.

Requiring applicants to obtain an individual permit under these conditions offers greater assurance that the impact of earth disturbance during construction can be substantially limited in terms of sediment and nutrient impacts to Pennsylvania waters.

E. Some "Site Restoration" projects should be reevaluated for eligibility under the draft PAG-01

Within the draft PAG-01 a category of "site restoration" projects are eligible (if they meet the size and impervious surface thresholds) for coverage. These projects differ from the "Rooftop" and/or "Roadway Standards" in that the site restoration projects are to restore areas of disturbance to approximately the original condition. However, under these types of projects it includes land clearing and grading for the sole purpose of creating vegetated open space such as parks and fields and athletic fields (natural grass) where these have no alteration of hydrology from pre- to post-construction.¹⁵ This essentially can allow for clearing of a forested area and replace it with a grassy field. Converting forest to a field is not the equivalent or approximately the same as the original condition.

Further, the condition of "no alteration to hydrology" has no method for ensuring that there is no net negative impact from a restoration activity. It is recommended that the draft PAG-01 be revised to include instructions on how applicants will determine and

¹⁵ Sample Permit, Part A. Section I.C.2.a. (page 17).

document that site restoration projects will impact water quality. Further, it is recommended that forested lands be excluded from this category and undergo more thorough review through the PAG-02 or individual permit.

In summary, the PAG-01 as a new general permit is designed to expedite the NPDES permitting process for “small” construction activities. Although CBF appreciates the efforts to do so, it cannot come at the expense of water quality, especially in the Chesapeake Bay watershed. Our recommendations noted above may help strengthen the draft PAG-01 by providing the necessary and required protections under the NPDES program.

Thank you for the opportunity to submit these comments. If you have any questions or would like to discuss these comments further, please feel free to contact us.

Respectfully Submitted,

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

Trisha L.R. Salvia
Staff Attorney, Pennsylvania Office