

PAG-01
NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM (NPDES)
GENERAL PERMIT FOR DISCHARGES OF STORMWATER ASSOCIATED
WITH SMALL CONSTRUCTION ACTIVITIES

COMMENT RESPONSE DOCUMENT

3800-PM-BCW0404 11/2021



COMMONWEALTH OF PENNSYLVANIA
DEPARTMENT OF ENVIRONMENTAL PROTECTION
BUREAU OF CLEAN WATER

INTRODUCTION

The Pennsylvania Department of Environmental Protection (DEP) published notice of the availability of a draft NPDES General Permit for Stormwater Discharges Associated with Small Construction Activities (PAG-01) in the *Pennsylvania Bulletin* on September 28, 2019 [49 Pa.B. 5642]. A 30-day comment period was provided, and interested parties were directed to submit comments to DEP's eComment system. The comment period ended on October 28, 2019. DEP received comments and questions from 12 different individuals and organizations during the comment period. The purpose of this document is to present DEP's responses to these comments and answer all questions posed.

DEP has decided to issue the final PAG-01 General Permit for a 5-year term. Notice of the availability of a final PAG-01 General Permit was published in the *Pennsylvania Bulletin* on November 13, 2021. The PAG-01 General Permit will become effective on March 1, 2022 and will expire on February 28, 2027.

LIST OF COMMENTERS

The names of individuals who submitted comments to DEP are identified below. DEP has recorded each comment in this document and identified the commenter(s) by number, corresponding to the list below.

- (1) Michael Hess, Herbert, Rowland & Grubic, Inc., 369 East Park Drive, Harrisburg, PA 17111.
- (2) Peter Vanderstappen, USDA NRCS, 359 East Park Drive, Suite 2, Harrisburg, PA 17111.
- (3) David Clark, Pennsylvania Grade Crude Oil Coalition, PO Box 149, Mt. Jewett, PA 16740.
- (4) Pennsylvania Builders Association, 2509 North Front Street, Harrisburg, PA 17110.
- (5) Joseph W. Sutor, P.E., Pennsylvania Turnpike Commission, PO Box 67676, Harrisburg, PA 17106-7676.
- (6) John Ackiewicz, Armstrong World Industries, 2500 Columbia Avenue, Lancaster, PA 17603.
- (7) Larry Mitros, Urban Engineers, 530 Walnut Street, Philadelphia, PA 19106.
- (8) Grant Gulibon, Pennsylvania Farm Bureau, 510 South 31st Street, PO Box 8736, Camp Hill, PA 17001-8736.
- (9) Kevin Sunday, PA Chamber of Business and Industry, 417 Walnut Street, Harrisburg, PA 17101.
- (10) Trisha Salvia, Chesapeake Bay Foundation, 1426 North Third Street, Suite 220, Harrisburg, PA 17102.
- (11) Alice Baker and Kody Hines, PennFuture, 1429 Walnut Street, Suite 400, Philadelphia, PA 19102.
- (12) Pennsylvania Stormwater Workgroup for Clean Water (Thomas Au, Conservation Chair, Sierra Club, Pennsylvania Chapter; Alice Baker, Senior Attorney, Citizens for Pennsylvania's Future (PennFuture); Harry Campbell, Pennsylvania Executive Director, Chesapeake Bay Foundation; Renee Reber, Associate Director, American Rivers).

COMMENTS AND RESPONSES

The number associated with each commenter is identified in parentheses following the comment.

1. **Comment:** In the “Eligibility Criteria” section of the instructions, item B.2.b indicates that projects having more than 12% total impervious area following construction are ineligible. An impervious threshold this low will likely exclude the majority of projects that would otherwise be eligible for coverage. What is the benefit of including this restriction if eligibility is already capped at 5 Acres of disturbance and 30,000 SF of total impervious? (1)

Response: In developing the PAG-01 General Permit, DEP conducted detailed analyses of various site conditions and stormwater best management practices (BMPs), and these analyses provide the foundation for the post-construction stormwater management (PCSM) BMP design standards detailed in Part A of the General Permit. DEP’s analyses indicated that the PCSM BMP design standards incorporated into PAG-01 provide sufficient protection of surface waters for stormwater discharges associated with small construction activities from project sites with up to 12% total impervious area post-construction. However, these analyses indicated that the selection and design of PCSM BMPs may require further evaluation beyond the design standards incorporated into PAG-01 to provide adequate protection of surface waters for stormwater discharges associated with small construction activities from project sites with more than 12% total impervious area post-construction.

2. **Comment:** In the “Eligibility Criteria” section of the Instructions, item B.1.a.b indicates that PCSM BMPs are prohibited in areas of known sinkholes or surface depressions. Additional clarification is needed on how the area is defined. Does “area of known sinkholes” refer to a direct overlap between a BMP and a sinkhole, or a prescribed buffer distance, or a geologic feature, or an entire municipality? We recommend that DEP adopt a prescribed buffer distance to facilitate implementation of this requirement, or prescribe in the instructions when a Professional Geologist should be called upon to make the determination. (1)

Response: Under PAG-01, a post-construction stormwater management (PCSM) BMP may not be located in an area of known sinkholes and surface depressions as identified through the DCNR interactive map or other published government data. If there is a known sinkhole or surface depression on a project site but the applicant will not install a PCSM BMP in or over the sinkhole or surface depression, the project may be eligible for PAG-01.

3. **Comment:** Eligibility Criteria B.3 requires that no stormwater from off-site impervious areas may flow onto the project site. This language suggests that any site containing a stream would be excluded from coverage even if all other criteria is met because the stream likely contains stormwater from off-site impervious areas. Is this the intent of this section? We recommend revising the language to clarify. (1)

Response: DEP has clarified in the final PAG-01 General Permit that no off-site stormwater may flow into PCSM BMPs that will be implemented. The design criteria for the PAG-01 BMPs do not consider the treatment of stormwater flows other than from the impervious areas delineated on the project site. As a result, projects in which off-site stormwater will flow onto a project site may be eligible for PAG-01 if the off-site stormwater will be diverted from PCSM BMPs. However, applicants must ensure that such off-site stormwater flows will not cause accelerated erosion.

4. **Comment:** The “Annual Fees” section of the instructions indicates that, if the annual fee is not paid by the due date, the permittee may be subject to additional fees and/or penalties. Please clarify whether or not these penalties will include cancellation of the permit. (1)

Response: DEP has decided to eliminate the annual fee requirement in the draft PAG-01 General Permit. There will be no annual fee required by the final PAG-01 General Permit.

5. **Comment:** The “Annual Fees” section of the instructions indicates that the permittee is responsible for timely submission of the annual fee regardless of whether or not a CCD issues an invoice. We recommend that CCD’s issue invoices. We believe that the effort involved in generating and issuing invoices will be less costly than the effort involved in enforcement actions against permittees who are willing and able to pay, but simply forgot. (1)

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Response: See DEP's response to Comment No. 4.

6. **Comment:** The "PCSM BMPs" section makes multiple references to an "infiltration rate equivalent to Hydrologic Soil Group B or better." Please provide additional clarification on how this notion of equivalency will be defined and enforced. (1)

Response: If native soils in the area of vegetated filter strips, rain gardens, and dry wells are not classified as Natural Resources Conservation Service (NRCS) Hydrologic Soil Group (HSG) A or B soils, the permittee must amend the first 8 inches and the first 20 inches of depth for HSG C and D soils, respectively, with sand, prior to implementing the BMPs. Unless otherwise approved by DEP or a delegated county conservation district (CCD), permittees must use silica sand meeting the specifications identified in AASHTO M-6 or ASTM C-33 for silica concrete sand. Calcium carbonate, magnesium carbonate, diabase, stone dust, and #10 screenings may not be substituted for silica sand. The permittee must utilize a soils scientist or other professional with education and training in soils science to determine when native soils classified as HSG C or D soils have been adequately amended to meet infiltration properties of HSG A or B soils prior to establishing vegetation. A record of the professional's evaluation and confirmation of adequate amendment must be maintained on-site during construction of the BMPs.

7. **Comment:** The maximum impervious areas for applying the rooftop or roadway PCSM standards seem to generate unnecessary review work for CCDs. The permit authorizes up to 30,000 SF of new impervious area, but a separate BMP is required for every 1,000 – 2,000 SF of impervious area depending on which standard is employed. This could create the need for CCD reviewers to evaluate 15-30 BMPs for a small project application. Is that realistic considering the 30 day review timeframe for qualifying plans? We recommend that the maximum impervious area tributary to each BMP be increased to 5,000 SF and the BMPs be sized accordingly. (1)

Response: DEP does not anticipate excessive review times based on the number of BMPs as long as those BMPs meet the design standards set forth in the general permit.

8. **Comment:** In the required Vegetated Filter Strip Length for the Roadway PCSM standard, a "jump" in the required length occurs at 501 SF because of the change in methodology from a percentage basis to a fixed length. We recommend that the methodology should change at 600 SF instead of 500 SF to eliminate the jump. Alternatively, a 5% filter strip length for all areas up to 1,000 SF could be employed. (1)

Response: DEP acknowledges that there is not a linear progression in filter strip length under the Roadway Standard. A 5% vegetative filter strip length for all areas up to 1,000 sf could be used but doing so would require a 50-foot length at 1,000 sf, which is significantly greater than is necessary for protection of surface waters and could make certain projects ineligible that would have otherwise qualified for PAG-01.

9. **Comment:** Comments on General Instructions. Item 6 - This appears to be beyond the scope of the permit. How do you anticipate that one proves they do not have contaminated soils? What benefit does this generate? Has this been identified as a problem on these types of small projects? (2)

Response: As described in the PAG-01 NOI Instructions (3800-PM-BCW0404a), applicants have a responsibility to conduct environmental due diligence prior to submitting a PAG-01 NOI. Environmental due diligence is defined in the PAG-01 General Permit as investigative techniques, including, but not limited to, visual property inspections, electronic database searches, review of ownership and use history of property, Sanborn maps, environmental questionnaires, transaction screens, analytical testing, and environmental assessments or audits. It is noted that analytical testing is necessary only if other sources of information lead the applicant to a conclusion that there has been a "release" of pollutants to on-site soils. If no such evidence of a release exists, analytical testing is not necessary. This due diligence is important for earth disturbance activity of any size because the disturbance of contaminated soils may result in pollutants entering stormwater runoff.

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- 10. Comment:** B.1.b. An important option should be added to the allowed PCSM options. For Agricultural operations that have permanent pasture or hayland, downhill from the new impervious areas, they should be able to use those areas in lieu of the proposed vegetated filter strips. It would be easy to add a table to require longer strips when the slope exceeds 2%. You could require that in order to use this option they have either a NRCS Conservation Plan or Soil Erosion and Sediment Control Plan meeting the Ag E&S Plan under 25 Pa. Code 102.4(a). These plans would show enough area of permanent hay or pasture below the impervious areas. This would be a practical approach. As a minimum, write into the instructions that permanent hayland or pasture can be used with some requirements. (2)

Response: Agricultural lands that meet the specifications of a vegetative filter strip in DEP's *Pennsylvania Stormwater Best Management Practices Manual* (BMP Manual) and contain HSG B soils or better may be utilized as a PCSM BMP under the PAG-01 General Permit. Such lands must be treated as a PCSM BMP with appropriate long-term operation and maintenance (O&M) and proper recording of a legal instrument to ensure long-term protection of the BMP.

- 11. Comment:** B.1.b. Since no basins are involved in the PCSM it appears to be an overreach and easy for a reviewer to look at the DCNR map and say that if a sinkhole or depression is in the area the project, it can't be approved under this permit is very subjective. How does moving this to a full-scale permit change the outcome? Our experience is that sinkhole issues generally happen in the stormwater basin. This concern is more applicable to larger projects. I understand your rational on the Fact Sheet, page 7, but these projects will at worst change a drainage area by less than 0.7 acres and no basins are allowed. My recommendation is to have the applicant identify if any known sinkholes are located downstream of the site and on their property. Then they must establish a 35' buffer. Sinkholes are certainly an issue but due to the scale of the work, this should not be a reason to eliminate this option. (2)

Response: See DEP's response to Comment No. 2.

- 12. Comment:** B.2.b. My understanding is that a consultant hired by DEP determined that runoff does not become an issue until the impervious area of a watershed exceeds 12%. Why not allow the option that if the total impervious area with improvements is less than 12% of the watershed and less than 30,000 SF, no PCSM are needed? That would be supported by your consultant findings. This could be check off box with supporting data showing the total drainage area. This would streamline projects located on large farm tracts. (2)

Response: DEP does not agree that its stormwater analysis for small construction activities suggests that PCSM BMPs would not be necessary if total impervious area is less than 12% of the project site and the new impervious area within the earth disturbance area is less than 30,000 square feet (sf).

- 13. Comment:** 2.a. Many local stormwater ordinances do not kick in until the impervious area exceeds a certain size. If the effort is to streamline the permit, when the net new impervious area is computed it should be allowed to waive any PCSM practice requirements if the net total area is under 2,178 SF or de minimus impact ≤ 0.05 acres. This same concept is used in other DEP Chapter 105 permits. In addition to waiving small areas the local Storm Water Ordinance should be waived if this permit is used. At this point the permit would then just address erosion and sedimentation control. (2)

Response: DEP may consider establishing a de minimis threshold below which new impervious surfaces would not require PCSM BMPs in the future for PAG-01.

- 14. Comment:** Note 5- Since a manure storage or other similar storage facilities do not discharge, you are allowing them to be not counted in the new impervious area calculation. These areas should then also not be counted in the disturbed area computation. (2)

Response: New manure storage or similar facilities generally involve earth disturbance during construction. That earth disturbance must be considered when evaluating the PAG-01 eligibility criterion that projects must involve less than 5 acres of earth disturbance.

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- 15. Comment:** The missed opportunity is giving additional offset credit beyond not including the waste storage and heavy use area in the impervious area calculation. These areas, when open topped, over collect and that credit should be allowed to offset other impervious areas. This precedence for impervious area reduction credit is allowed for in the dry well in example 7.a. Suggest you set a fixed number. My suggestion is 0.3 SF offset for each SF of impervious area with no discharge. Example: 40'x90' HUA draining into a 100' dia. waste storage facility has a total area of 3,600 SF + 7,850 SF = 11,450 SF. Impervious Area Reduction Credit would be $(11,450 \times .3 \text{ SF/SF})$ 3,435 SF in addition to not counting those areas to start with. **(2)**

Response: DEP is willing to consider "offsets" in a future version of PAG-01 for the situation where runoff occurs prior to an earth disturbance activity and zero runoff will occur following the activity, but believes additional research is necessary before establishing a standardized offset for statewide use.

- 16. Comment:** Discharges and activities not authorized. A. This is a very subjective determination as stated before. Extensive parts of many counties could be eliminated because of the potential sinkhole or an existing sinkhole. See my comments from above. **(2)**

Response: See DEP's response to Comment No. 2.

- 17. Comment:** Note 15 – The idea that an annual fee is required each new calendar could be very unfair. If a permit is issued in November, the odds are that the work will not be done till the following year and another fee will be demanded. A less onerous method would be to say that an additional fee is needed one year after the date of issuance until the NOT. I would speculate that the group collecting the fee remind the applicant when it is due. **(2)**

Response: See DEP's response to Comment No. 4.

- 18. Comment:** Figure 3: Example Project Site..... And Table 1. Rooftop Standard Summary. Setback distances of 500' for $\leq 5\%$ slope and 800' for $\geq 5\%$ slope would eliminate most sites and force the installation of a small berm. My question is why such a distance? Where did these numbers come from? Let's look at a 5-acre site. Let's assume it is a square lot. That dimension would be 466.6' by 466.6'. Again, the setback is impossible to meet, thus the only option is the berm. **(2)**

Response: These setbacks were determined through the use of hydraulic modeling software. The installation of a berm is a reasonable alternative for those sites that do not have the setback option.

- 19. Comment:** The Pennsylvania Grade Crude Oil Coalition (PGCC) is a trade organization consisting of conventional oil and gas producers operating in Pennsylvania. PGCC submits this comment about the draft PAG-01 out of concern that the PAG-01 will be confusing as currently drafted. Specifically, PGCC notes that Section II ("Eligibility Requirements") of the Draft PAG-01 provides for certain exclusions; PGCC requests that you include in that list the following additional exclusion: "The project does not involve storm water discharges or earth disturbance activities associated with oil and gas activities, including oil and gas exploration, production, processing, or treatment operations or transmission facilities." PGCC observes that such an addition would make clear that the PAG-01 NPDES General Permit is not in conflict with existing law and regulations.

The existing law and regulations that would cause confusion are the US Clean Water Act (CWA) and PADEP's erosion and sediment control regulations. Specifically, Section 402(1)(2) of the CWA, and the Energy Policy Act of 2005, prohibit the EPA and states from requiring an NPDES permit for discharges of stormwater runoff from the oil and gas activities discussed in the proposed exclusion, above. PADEP's erosion and sediment control regulations under 25 Pa. Code Chapter 102 explicitly exclude oil and gas activities that involve under five acres of earth disturbance activities from erosion and sediment permitting requirements, as only persons proposing oil and gas activities that involve five or more acres of earth disturbance over the life of the project must obtain an erosion and sediment control general permit (ESCGP) prior to commencing the earth disturbance activities. Oil

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and gas activities involving less than five acres of earth disturbance activities must comply with other erosion and sedimentation regulations under Chapter 102, including developing erosion and sedimentation control plans, but are not required to apply for an ESCGP.¹

By inserting the additional exclusion suggested above, the relationship between the PAG-01 and the cited statute and regulations will be made clear. Thank you for the opportunity to comment.

Footnote:

- 1 25 Pa. Code § 102.5(k) (“A person proposing or conducting an earth disturbance activity who is not required to obtain a permit under this chapter shall comply with the other provisions of this chapter.”). See also 25 Pa. Code § 102.4. **(3)**

Response: A permit is not required under 25 Pa. Code § 102.5(c) unless earth disturbance associated with oil and gas activities is at least 5 acres (i.e., exceeding PAG-01’s threshold), and the regulations require an E&S Permit rather than an NPDES permit. The requested update has not been made.

20. Comment: Page 3, Opening Paragraph. Page 3 of the Draft Permit, first paragraph states:

“In compliance with the provisions of the Clean Water Act, 33 U.S.C. Section 1251 et seq. and Pennsylvania’s Clean Streams Law, as amended, 35 P.S. Section 691.1 et seq., the Department of Environmental Protection (DEP) hereby authorizes, subject to the terms and conditions contained in this General Permit, the discharge of stormwater associated with small construction activity from earth disturbances less than five acres to surface waters of the Commonwealth.”

The phrase “to surface waters of this Commonwealth” is misleading and conflicting as there are separate and distinct definitions for both Surface Waters and Waters of this Commonwealth. They are defined in Section I as:

“Surface Waters – Perennial and intermittent streams, rivers, lakes, reservoirs, ponds, wetlands, springs, natural seeps, and estuaries, excluding water at facilities approved for wastewater treatment such as wastewater treatment impoundments, cooling water ponds, and constructed wetlands used as part of a wastewater treatment process.”

“Waters of this Commonwealth – Rivers, streams, creeks, rivulets, impoundments, ditches, watercourses, storm sewers, lakes, dammed water, wetlands, ponds, springs, and other bodies or channels of conveyance of surface and underground water, or parts thereof, whether natural or artificial, within or on the boundaries of this Commonwealth.”

Therefore, to avoid confusion to all permittees it is strongly suggested that DEP update the Draft Permit’s Page 3, first paragraph (and all similar inappropriate references throughout PAG-01), to the following:

“In compliance with the provisions of the Clean Water Act, 33 U.S.C. Section 1251 et seq. and Pennsylvania’s Clean Streams Law, as amended, 35 P.S. Section 691.1 et seq., the Department of Environmental Protection (DEP) hereby authorizes, subject to the terms and conditions contained in this General Permit, the discharge of stormwater associated with small construction activity from earth disturbances less than five acres to surface waters.” **(4)**

Response: This phrase “surface waters of the Commonwealth” has been changed to “surface waters” in the final PAG-01 General Permit, Authorization to Discharge page (page 1) and page 3.

21. Comment: Section I: Definitions. Waters of the Commonwealth is defined in Section I as:

“Rivers, streams, creeks, rivulets, impoundments, ditches, water courses, storm sewers, lakes, dammed water, ponds, springs, and other bodies or channels of conveyance of surface and underground water, or parts thereof, whether natural or artificial, within or on the boundaries of this Commonwealth.”

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DEP is over-reaching in the use of the term “artificial” in defining Waters of this Commonwealth. Artificial (human-made) ponds or underground water are often types of post-construction stormwater management (PCSM) BMPs installed during commercial, residential, and industrial construction activities. Examples of artificial ponds are retention/detention ponds and bioretention areas; and, examples of artificial underground water are underground vaults or chambers used for stormwater retention/detention typically implemented in commercial construction sites.

PCSM BMPs are designed to accept and treat stormwater runoff from impervious areas in perpetuity. Stormwater runoff is inherently comprised of a myriad of pollutants that are typically abated using the PCSM BMPs. Therefore, including these types of artificial waters into the definition of Waters of the Commonwealth is encouraging liability to the owners of the PCSM BMPs, as they are designed to treat potentially polluted stormwater runoff.

Additionally, Waters of the United States as defined in 40 CFR 122.2(2)(vi) states:

“(2) The following are not “waters of the United States” even where they otherwise meet the terms of paragraphs (1)(iv) through (viii) of this definition. (vi) Stormwater control features constructed to convey, treat, or store stormwater that are created in dry land.”

Therefore, it is strongly recommended that DEP remove the term “artificial” from the definition of Waters of the Commonwealth, to the following:

“Rivers, streams, creeks, rivulets, impoundments, ditches, watercourses, storm sewers, lakes, dammed water, wetlands, ponds, springs, and other bodies or channels of conveyance of surface and underground water, or parts thereof, within or on the boundaries of this Commonwealth.” **(4)**

Response: The term, “Waters of this Commonwealth” is defined in the PAG-01 General Permit because the General Permit includes other definitions that use this term. The definition in PAG-01 is consistent with the term, “Waters of the Commonwealth” as defined in Pennsylvania’s Clean Streams Law and the term, “Waters of this Commonwealth” as defined at 25 Pa. Code § 102.1.

- 22. Comment:** Section II. On Page 7 and 8 of the Draft Permit, the following sections: II.6, II.7, and II.8; need to be changed to II.5, II.6, and II.7, respectively. **(4)**

Response: This mistake has been corrected in the final PAG-01 General Permit.

- 23. Comment:** Part II.B.1.a. Part II.B.1.a states:

“Applicants must select E&S BMPs to control stormwater runoff during earth disturbance activities that will be designed, installed and maintained in accordance with DEP’s Erosion and Sediment Pollution Control Program Manual (363-2134-008) (E&S Manual), as amended, with the exception of sediment traps and sediment basins which cannot be utilized under this General Permit.”

It is perplexing why DEP will not afford the permittees the option to utilize sediment basins or sediment traps during construction operations if seeking coverage under PAG-01. When implemented properly, these two types of E&S controls are very effective at detaining and treating construction stormwater runoff. Additionally, pertaining to sediment basins/traps there are several sections of the Draft Permit that contain conflicting information.

- Section III.B.7 (Authorized Non-Stormwater Discharges) states:

“7. Pavement wash waters, provided spills or leaks of toxic or hazardous substances have not occurred and where cleaning agents are not used if such wash waters are directed to a **sediment basin** or similar BMP.”

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- Part A.I.B.6 states:

“The permittee shall utilize outlet structures that withdraw water from the surface when discharging from **basins** and impoundments, unless infeasible.”

Therefore, it is strongly recommended that DEP allow the permittees the ability to use sediment traps or sediment basin E&S controls during the construction activities covered under PAG-01. **(4)**

Response: DEP is seeking to minimize technical reviews associated with E&S BMPs; sediment basins and traps often involve significant review time. This is also the reason that DEP is not authorizing the use of alternative E&S BMPs under PAG-01. These E&S BMPs may be proposed in an NOI for PAG-02 General Permit coverage. DEP has removed references to sediment basins in the sections identified above.

- 24. Comment:** Section III.B.11. Change the following reference, “See Part A.I.A.3” to “See Part A.I.B.3”. **(4)**

Response: The recommended change has been made.

- 25. Comment:** Part C IV A & E, Long-Term Operation and Maintenance. Part C IV.A states:

“The permittee shall be responsible for long-term operation and maintenance (O&M) of PCSM BMPs unless a different person is identified in the NOT and that person has agreed to long-term O&M of PCSM BMPs.”

Part C IV.E states:

“A permittee that fails to transfer long-term O&M of the PCSM BMPs or otherwise fails to comply with this requirement, shall remain jointly and severally responsible with the landowner for long-term O&M of the PCSM BMPs located on the property.”

DEP’s requirement that the permittee identify the person(s) that has agreed to the long-term operation and maintenance (O&M) of the Post Construction Stormwater Management (PCSM) BMPs on the Notice of Termination (NOT) is burdensome to the permittee or co-permittee(s), unnecessary, and should be removed from the Draft Permit. There may be various external factors that are out of the control of the permittee as to why a landowner of the property containing a PCSM BMP will not agree to long term O&M on the NOT.

For this reason, making the permittee jointly and severally liable with the landowner for the long-term O&M is impractical; places permittees at risk for significant penalties; and, redundant as procedures are already included in the Draft Permit to ensure that the landowners of the property with a PCSM BMP are provided their long-term maintenance obligations. Therefore, the requirement that the permittee identify the person(s) that has agreed to the long-term O&M of the PCSM BMPs should be removed from the Draft Permit for these and the following reasons:

- The Draft Permit already contains language that the permittee will record documents pertaining to the PCSM BMP, and their related obligations that are binding to the property regardless if the landowner(s) changes. Part C IV.B of the Draft Permit states:

“For any property containing a PCSM BMP, the permittee shall record an instrument with the Recorder of Deeds which will assure disclosure of the PCSM BMP and the related obligations in the ordinary course of a title search of the subject property. The recorded instrument must:

1. Identify the PCSM BMP. PCSM BMPs under this General Permit include all BMPs identified in the PAG-01 NOI and PCSM Plan, including vegetated areas used for managing stormwater through overland flow.
2. Provide for necessary access related to long-term O&M for PCSM BMPs.

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3. Provide notice that the responsibility for long-term O&M of the PCSM BMPs is a covenant that runs with the land that is binding upon and enforceable by subsequent grantees.

The permittee shall provide proof of filing the instrument with the Recorder of Deeds as an attachment to the NOT required by Section VI of this General Permit"

- And required to be provided to subsequent owner(s) or transferee(s), Part C IV.I of the Draft Permit:

"Unless an alternative process is approved by DEP/CCD in writing, upon the sale or other transfer of any parcel, lot, road or other real property included within the permit boundary, the permittee shall notify the purchaser, grantee, or transferee of the long-term PCSM BMP O&M requirements. The permittee shall expressly identify:

1. The PCSM BMPs on each property.
2. The schedule for inspection and reporting.
3. The person or entity responsible for long-term O&M of the PCSM BMPs.
4. How access to the BMPs will be achieved." (4)

Response: Someone must be identified as being responsible for long-term O&M of such BMPs, and it may be the permittee or co-permittee(s) in the absence of some other identified person(s). The permit language is a restatement of the regulatory language at 25 Pa. Code § 102.8(m).

26. **Comment:** First, we applaud the Department's efforts to provide the regulated community additional Permitting options available for construction activities. We would like to encourage the Department to continue to review existing Permit requirements and either amend or provide new options to the regulated community. Second, we are not sure how this proposed Permit will deal with the issue of naturally-occurring elements that are often encountered on projects that require earth disturbance. (5)

Response: DEP understands that earth disturbance can reveal unanticipated features that may result in challenges to completing projects. Permittees should communicate with DEP or CCD upon discovery of such features to work through these challenges under appropriate regulatory and statutory authorities.

27. **Comment:** PAG-01 NOI Instructions: Page 11, Note 15, Fee Exemptions – Due to the Commission's recent Agreement with the DEP, we assume we also meet the requirements to be exempt from the fees. (5)

Response: The PAG-01 does not alter the fee exemption status of the Pennsylvania Turnpike Commission.

28. **Comment:** PAG-01 NOI Instructions: Page 11, PNDI Receipt – We would suggest adding language to this Section stating the PNDI receipt is up-to-date and will not expire during the Permit review. (5)

Response: DEP has made the recommended update.

29. **Comment:** PAG-01 NOI Instructions: Page 12, 5th paragraph – Is there something missing from the part of the sentence that currently reads, "and the existing and existing (i.e. total)... (5)

Response: DEP has corrected this error.

30. **Comment:** PAG-01 NOI Instructions: Page 18, Preparedness, Prevention and Contingency (PPC) Plan – We would suggest that when discussing a PPC Plan, it should be a "site specific" PPC Plan. (5)

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Response: DEP has clarified in the PAG-01 NOI Instructions that PPC Plans are to be site-specific.

- 31. Comment:** PAG-01 NOI Instructions: Page 18, Operators/Co-Permittees – We would suggest changing the heading to “Permittee/Co-Permittees”. (5)

Response: The section specifically addresses operators who are required to become co-permittees, so DEP believes the heading is appropriate.

- 32. Comment:** PAG-01 NOI Instructions: Page 25, 7. Pre-Application Meeting/Call Date – We agree that in most cases, holding a Pre-Application Meeting is very useful and worth the effort. We would also suggest that applicants are encouraged to include Meeting Minutes of the Pre-Application Meeting with their Permit Application. (5)

Response: DEP believes the submission of meeting minutes with an application or NOI would generally be unnecessary, as DEP practice is – and is anticipated to remain – that minutes are kept by DEP and shared with the applicant.

- 33. Comment:** Many of the above comments would also be applicable to other sections of this Permit Application. (5)

Response: DEP acknowledges the comment.

- 34. Comment:** Permit: I. Definitions: Since the term Limit of Disturbance (LOD) is commonly used on the E&S/NPDES Plans, we would suggest that you add a definition for Limit of Disturbance. (5)

Response: DEP agrees that “Limit of Disturbance” is a commonly used term but it is not a term defined or used in the Chapter 102 regulations or in the PAG-01. DEP believes there is general understanding throughout the regulated community and by DEP and CCD staff that the term refers to the aerial extent of an earth disturbance activity as delineated on approved E&S and PCSM Plan Drawings.

- 35. Comment:** Permit: I. Definitions: Earth disturbance activity – Land clearing to us can mean the cutting down of trees and other vegetation without the removal of their roots. However, “Grubbing” does involve the removal of roots, rock and so forth. Therefore, we suggest that a distinction be made between the two and be stated in your definition. (5)

Response: The definition for earth disturbance activity in the PAG-01 General Permit is that which is defined in DEP’s regulations at 25 Pa. Code § 102.1. The definition refers to “clearing and grubbing” in sequence.

- 36. Comment:** Permit: I. Definitions: Waters of the Commonwealth – We would suggest the definitions for Water Course and Submerged Lands, as found in 25 Pa. Code 105, be used instead of the term Waters of the Commonwealth. (5)

Response: The terms, “water course” and “submerged lands” are specific to 25 Pa. Code Chapter 105 and are not found in 25 Pa. Code Chapter 102.

- 37. Comment:** We would propose that for small projects, it should not be a requirement for a preapplication meeting/phone call, and for a preconstruction meeting. That should be done only when necessary. Extensive information is required as part of the NOI; so if there is additional clarification required by either the agency or the applicant - that would be the time for a phone call/meeting. The concern is that these meeting requirements would cause project delays and add to the administrative burden on the Department. (6)

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Response: Given DEP's objective of reducing the review period for PAG-01 NOIs so that resources may be allocated to larger, higher-risk projects, DEP believes it is important for DEP and CCD staff to have knowledge of proposed projects in advance of NOI submissions. However, DEP and delegated CCDs retain the ability to waive the pre-application meeting if an in-person meeting or phone call cannot be scheduled within a reasonable period of time.

- 38. Comment:** It is unclear how this permit would interface with PAG-02 (earthmoving projects > 1 acre). Would these two permits overlap, and in that case, which one would you use? **(6)**

Response: It is possible that a project could qualify for both the PAG-01 and PAG-02 general permits. In such cases, the applicant can apply for coverage under either general permit, but not both.

- 39. Comment:** We have a question regarding the Maximum Area for the Roadway Standard. The NOI Instructions state, "The maximum area of impervious surface that can be treated by any PCSM BMP under the Roadway Standard is 1,000 square feet (sf). In addition, roadways or driveways that are greater than 20 feet wide or are on steep slopes (i.e >10%) should be treated under the Rooftop Standard".

Per the permit instructions, the fundamental BMP for treating sheetflow from a roadway surface is a vegetated filter strip. But given the 1,000 sf limit, it would appear that many transportation projects may not fit the design criteria laid out in this permit. For example, let's say a site contains a 20' wide roadway that is 200' long, with a constant cross slope in a fill condition so that runoff sheet flows off the road. Installing a 30' wide vegetated filter strip that runs along the roadway would appear to meet the intent of the permit, but would this not be allowed since the roadway surface is 4,000 sf?

And since this is a sheet flow condition, it would appear the more important factor in determining the feasibility of the BMP would be the width of the contributing roadway, and not necessarily the overall square footage, as runoff from the beginning of the roadway would not reach areas of the vegetated filter strip further downstream.

Please provide clarification as to how the roadway surface in the above example would be treated while meeting the requirements of the permit. **(7)**

Response: Under the PAG-01, vegetative filter strips treating roadway runoff must include a 12-inch gravel verge and span the width of the roadway. A roadway with 4,000 sf of impervious would be treated by a continuous vegetative filter strip with a length of 30 feet. A PCSM Plan Drawing should delineate four 1,000-sf sections of impervious surface. Following the 30-foot long vegetative filter strip, a berm with a height at least 6 inches may be installed if 800 feet of pervious area is unavailable following the filter strip. In other words, the berm may or may not be continuous depending on the availability of downslope pervious area.

- 40. Comment:** An electronic format for completing the application for the PAG-01 permit should be implemented. In conjunction with requiring attendance at pre-application and pre-construction meetings, that would reduce errors and omissions and help reduce approval time needed to issue the permit. An estimate of the number of business days required to complete the DEP approval process for the PAG-01 would also be helpful. **(8)**

Response: DEP is currently working toward development of an electronic permit application and NOI system for Chapter 102 permits. DEP's goal is for DEP or the delegated CCD to take an action on PAG-01 NOIs within 30 or 60 calendar days (which equates to approximately 22 or 44 business days, excluding holidays), depending on certain factors detailed in the PAG-01 permit documents, and not including time spent by applicants in correcting deficiencies.

- 41. Comment:** Placing the PAG-01 under the constraints of the Department's Permit Decision Guarantee would be advantageous to the permittee who is planning the construction activities. **(8)**

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Response: DEP will consider establishing PAG-01 as an authorization type subject to the Permit Decision Guarantee (PDG) after analyzing DEP/CCD's performance in the review of these NOIs; regardless, DEP's objective is for expeditious reviews when complete NOIs are submitted.

- 42. Comment:** The PAG-01 should be priced below the cost of a PAG-02 and other more detailed NPDES permits due to the reduced need for engineering studies and smaller quantity of disturbed acreage under construction. **(8)**

Response: DEP's fees are established in regulation for general permits (see 25 Pa. Code § 102.6(b)). DEP anticipates that applicants will experience lower engineering and consulting expenses for PAG-01 as compared with PAG-02 and individual permits because a site-specific stormwater analysis is unnecessary for PAG-01.

- 43. Comment:** Future revisions and additions to the PAG-01 should include the introduction of porous asphalt to facilitate storm water management systems by promoting water infiltration and improving water quality. **(8)**

Response: DEP will consider this for future versions of PAG-01.

- 44. Comment:** An outreach to the public should be conducted announcing the PAG-01 permit which explains the designated use pertaining to small projects defined as equal to or greater than one acre but less than five acres of earth disturbance. The Department should include information on the required pre-application and pre-construction meeting to improve the accuracy and approval rates of the PAG-01 permit. **(8)**

Response: DEP will conduct appropriate outreach to ensure the public is aware of the PAG-01 General Permit.

- 45. Comment:** Before an applicant can qualify for PAG-01 approval, there must be a current E & S Plan which meets the requirements of the DEP E & S Manual (as referenced on p. 1, # 2, p. 8, B Design Requirements, a). It may be helpful to note that a revised version of the E & S Manual will be finalized in late 2019 or early 2020 with updated conservation information applicable to small construction projects. **(8)**

Response: DEP does not believe it is prudent to note potential or anticipated changes to other documents in a general permit as suggested. As new guidance is finalized and available, DEP will communicate its availability and use appropriately.

- 46. Comment:** Under Section D (Denial of Coverage, p. 9, # 3), the draft should mention introducing a third party, such as an agricultural engineering consultant, to determine the underlying cause of failing to comply with the terms of the permit and whether the cause is out of the control of the permittee. **(8)**

Response: If an applicant is denied PAG-01 coverage due to a history of non-compliance, it would be in the applicant's best interests to understand the cause(s) of non-compliance and steps necessary to achieve compliance. A consultant may be able to assist an applicant in this regard.

- 47. Comment:** We recommend DEP amend the final PAG-01 permit conditions and criteria such as not to obligate pre-application and pre-construction meetings with DEP regional offices or the county conservation districts. The general working practice of general permits in the past have been to establish uniform, clear permitting standards for a particular type of industry, and the project developer submits a demonstration of their capabilities and intent to comply with those criteria in the general permit application, with DEP making its determination based on the information included in the application. A blanket requirement for all applicants seeking coverage under PAG-01 will only divert additional staff and resources away from processing these permits in an efficient manner.

We recommend DEP instead write into the general permit that DEP or the county conservation district may request a pre-construction meeting, but that discharges under an issued PAG-01 do not constitute a violation of law and that DEP's request for a preconstruction meeting should not delay DEP's 30- or 60-day timeline for

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review and decision. We also note that the draft PAG-02 permit published for comment earlier this year did not require pre-application meetings. (9)

Response: DEP is requiring pre-application meetings, unless waived by DEP or CCD, for PAG-01 coverage due to the ambitious review periods for PAG-01 as compared to PAG-02. Also see DEP's response to Comment No. 37.

- 48. Comment:** 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.

Footnotes:

- 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> (10)

Response: DEP acknowledges the comment.

- 49. Comment:** 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

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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.

- 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. **(10)**

Response: Thank you for the comments.

50. Comment: 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:

Administrative Issues – 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 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.

Footnotes:

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> **(10)**

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Response: DEP agrees that guidance documents such as the manuals identified in the comment are most effective when updated to reflect the understanding and expectations of DEP. DEP will attempt to revise technical guidance documents more frequently and in concert with changes to permitting processes in the future as deemed appropriate.

51. Comment: 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.

Footnotes:

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

8 Sample Permit, Part A. Section II.H. (page 25). **(10)**

Response: DEP utilizes its authority to require monitoring as needed. Accounting for the eligibility requirements and the conservative nature of the prescribed BMPs under the PAG-01, DEP is confident in its stormwater analysis and does not believe that a blanket monitoring requirement is necessary.

52. Comment: 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 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.

Footnote:

9 For example, Fact Sheet, Scope (page 1). **(10)**

Response: DEP understands the benefit of these meetings and believes the requirement as written is adequate and appropriate.

53. Comment: NOI should be required upon renewal and NOIs should be published in the Pennsylvania (Pa.) Bulletin.

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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.

Footnote:

10 Fact Sheet, Scope (page 2). **(10)**

Response: The submission of an NOI to renew coverage for a new permit term is required by the PAG-01 General Permit (see “Duty to Reapply” provision in Part B of the General Permit). While DEP is not required to publish notice of the receipt of PAG-01 NOIs (see 25 Pa. Code § 92a.84(c)), DEP appreciates the benefits of public notice and will continue to consider ways to improve public notice and participation.

54. Comment: 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.

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 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

Footnote:

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

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Constitution, see also, *Robinson Township v. Commonwealth*, 83 A.3d 901 (Pa. 2013); *Pennsylvania Environmental Defense Foundation v Commonwealth*, 161 A.3d 911. **(10)**

Response: DEP has considered the potential for projects authorized under the PAG-01 General Permit to individually and cumulatively cause significant adverse environmental impact. The PAG-01 General Permit utilizes the latest research in stormwater science and redundant practices to ensure compliance with the requirements of 25 Pa. Code Chapter 102. The suite of PCSM BMPs selected for use under the PAG-01, when used as required and in accordance with the BMP manual, as amended, represent ABACT as defined in 25 Pa. Code § 102.1, and in many cases meet the definition of nondischarge alternative. While the PAG-01 General Permit cannot be used in special protection waters, DEP is confident that by meeting these heightened regulatory standards, the BMPs utilized in the PAG-01 meet and often exceed the requirements of Chapter 102 both individually and cumulatively.

The PAG-01 represents a different approach than the PAG-02 General Permit and individual permits issued historically under Chapter 102. The prescriptive nature of the PAG-01 limits the types of controls a permittee may utilize and relies on DEP's thorough analysis of the prescribed BMPs instead of requiring the applicant to develop an analysis for DEP's approval. DEP's intent in creating the PAG-01 is to provide a reliable and efficient means for permittees to meet regulatory requirements in situations that are considered low-risk pursuant to the eligibility criteria set forth in the general permit. The eligibility criteria ensure that the existing characteristics of the project site and the proposed alterations to the project site will be consistent with the assumptions and considerations underlying the PAG-01. Applicants who meet the eligibility criteria and utilize the BMPs as required by the PAG-01 will benefit from decreased consultant fees for the development of a PCSM Plan stormwater analysis, and the use of PAG-01 will allow DEP to better allocate resources to higher-risk and more complicated permitting determinations.

55. Comment: 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. **(10)**

Response: If all of the lands within a watershed are developed or redeveloped in a manner where the earth disturbance activities are eligible for PAG-01 and the projects utilize the PCSM BMPs prescribed by PAG-01, DEP has a high degree of confidence that post-construction stormwater discharges would not cause or contribute to siltation and nutrient-related impairments. Holistically, the eligibility requirement that post-construction impervious area not exceed 12% of total project site area addresses the concern raised in this comment, regardless of the number of projects covered under PAG-01 within a watershed. The PCSM BMPs prescribed by PAG-01 effectively implement the nondischarge alternative as defined at 25 Pa. Code § 102.1 under most conditions, i.e., the BMPs eliminate the net change in stormwater volume, rate, and quality (pollutant loading) up to the 2-year/24-hour storm event, based on DEP's stormwater analysis.

56. Comment: 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

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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 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.

Footnote:

12 Fact Sheet (page 8). **(10)**

Response: See DEP's response to Comments No. 54 and 55. The Department disagrees that a site-specific stormwater analysis is necessary where the applicant meets the eligibility requirements and utilizes the BMPs required by the PAG-01.

57. Comment: 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. **(10)**

Response: As stated in the General Permit, the PAG-01 General Permit does not convey property rights or authorize any injury to private property or invasion of personal rights. It is the duty of applicants to secure, through appropriate legal means, the right to discharge onto adjacent properties where necessary, and to ensure compliance with other federal, state, and local laws. Various types of easements and other property rights concepts may allow for such discharges, and DEP is not the appropriate authority to adjudicate any potential dispute over such rights, which would require determinations of both fact and law. It is noted that even a purported express easement could be subject to legal dispute.

Regardless of the means by which an applicant obtains the right to discharge onto adjacent properties, the applicant must demonstrate that construction and post-construction stormwater discharges to areas other than surface waters will not cause accelerated erosion on other properties.

58. Comment: 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.

Footnote:

13 For example, Sample Permit, 4., page 3. **(10)**

Response: DEP acknowledges the comment. The language in the PAG-01 NOI Instructions is intended to cover a variety of potential approvals, including various municipal approvals, where applicable. DEP disagrees

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with the comment to the extent that it implies that an express easement or express written waiver from a landowner is required. Also, see DEP's response to Comment No. 57.

59. Comment: 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 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. **(10)**

Response: See DEP's response to Comment No. 57.

60. Comment: 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]. 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. **(10)**

Response: The means by which an applicant secures legal rights to discharge onto off-site properties is not dispositive as to regulatory compliance. Regardless of the legal concept by which an applicant secures rights to discharge onto off-site properties, DEP requires E&S and PCSM Plans to include information relative to such off-site discharges. The plans must show the flow path from the project site to the receiving water, as well as information pertaining to that flow path, including property lines, contours, soils, and other information. DEP does not believe that an express easement would, necessarily, provide the type of information the comment suggests would be helpful in determining compliance with any regulatory requirement. Also, see DEP's response to Comment No. 57.

61. Comment: 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. 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.¹⁴

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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.

Footnote:

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. **(10)**

Response: See DEP's response to Comment No. 57.

62. Comment: 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. **(10)**

Response: Applicants for PAG-01 coverage must comply with 25 Pa. Code §§ 102.4(b) and 102.8 concerning the implementation of E&S and PCSM BMPs. When these BMPs are properly designed, implemented, and maintained, the requirements of Chapter 102 will be met regardless of proximity to surface waters.

63. Comment: 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

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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 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.

Footnote:

15 Sample Permit, Part A. Section I.C.2.a. (page 17). **(10)**

Response: Site restoration is a PCSM BMP, and restoration practices are identified and explained in the *Pennsylvania Stormwater Management Best Management Practices Manual* (“BMP Manual”), including methodology and design considerations. Restoration, in a general sense, is intended to return the land surface to pre-construction conditions from a hydrologic perspective. This may include original contours, restoring infiltration capacity, and revegetating the land surface. The goal of restoration is to restore permeability, allowing for soil surfaces to absorb rainfall and allow for evapotranspiration to a degree similar to that which existed prior to earth disturbance.

DEP agrees that the ecological functions and values of forested lands differ from meadow or other vegetation; however, the runoff generated between these conditions is essentially identical according to well-established, national protocols, which is of greatest importance in establishing criteria for activities that may be considered site restoration under 25 Pa. Code § 102.8(n).

- 64. Comment:** Stormwater runoff is a major contributor to water pollution. In urban areas, stormwater runoff flows from the streets, parking lots, or other impervious surfaces and into storm drains, absorbing a variety of pollutants along the way. This contaminated water has the potential to severely impact water quality. Stormwater runoff associated with construction activities can be particularly harmful. For example, earth disturbance activities associated with construction, such as grading, often produce large amounts of sediment that can be transported to local waters via stormwater discharges. Increased sediment in waterbodies has the potential to cause biological, chemical, and physical harm to a watershed. Thus, properly managing the effects of stormwater discharge is essential.

Because of the potential negative impacts of runoff and the limited duration of intensive activity at construction sites, properly permitting this activity is particularly important. Typically, NPDES permits limit, monitor, and report discharge, ensuring the water quality of the receiving water is acceptable. While individual NPDES permitting can be a lengthy procedure, in certain specific circumstances general permits can streamline this management process. General permits cover multiple dischargers, which operate in a similar field and discharge similar pollutants, such as discharges related to construction activities.

Despite its one-size-fits-all nature however, a general permit must serve its purpose—manage the discharge of pollutants. Here, PAG-01 suffers from several problems that result in a general permit that is ineffective in ensuring protection of Pennsylvania’s waters. The following comments address issues with the Draft Permit to provide for a more effective general permit that benefits regulators, permittees, and citizens alike.

DEP Must Assess Cumulative Impacts in Order to Comply with Pennsylvania’s Environmental Rights Amendment.

As a new permit, DEP should ensure the effectiveness of PAG-01 and must comply with the Pennsylvania Constitution. In creating the Draft Permit, DEP set out to establish a simplified permit that will speed up the permitting process. However, this cannot be done at the expense of the environment. Article I, Section 27 of the Pennsylvania Constitution—the Environmental Rights Amendment—provides:

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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.

The text establishes a duty for the Commonwealth government to prohibit the degradation, diminution, and depletion of Pennsylvania's public natural resources, whether the harms result from direct state action or the state's permitting of private parties.¹ As trustee of the state's natural resources, the Commonwealth must protect "equally against actions with immediate severe impact on public natural resources and against actions with minimal or insignificant present consequences that are actually or likely to have significant or irreversible effects in the short or long term."²

In order to fulfill the obligations of Pennsylvania's Environmental Rights Amendment, the Department must evaluate and minimize cumulative impacts of PAG-01. Although the Draft Permit is designed to address construction projects disturbing under five acres, it does nothing to consider or mitigate the impacts of numerous small projects located in the same watershed and potentially allows for pollution to be generated from a significantly larger area than the limited earth disturbance area.

As a trustee of our natural resources, the Department must ensure that, as multiple projects gain coverage under the Draft Permit, cumulatively adverse impacts do not result. The Draft Permit does not present any mechanism through which the Department can make this assurance. Per the Pennsylvania NPDES regulations, a Notice of Intent for coverage under general permits "must . . . demonstrate that the discharge from the point sources, individually and cumulatively, will not cause or contribute to an applicable water quality standard."³ The inclusion of this information provides some, all be it limited, basis for the Department to evaluate cumulative impacts. However, neither this Draft Permit, nor its accompanying Notice of Intent, have any mention of such potential cumulative impacts, nor even indication of relevant attainment status of water quality standards of receiving waters. With no information about environmental impacts on receiving waters, DEP is left completely unable to evaluate cumulative impacts. Thus, PAG-01 has the potential to result in cumulative impacts to Pennsylvania's natural resources without any analysis or mitigation approaches. Adverse water quality impacts would occur but would be unknown and unmonitored. Without providing assurance that cumulative impacts of multiple permittees are addressed, the Draft Permit fails to meet the obligations of the Environmental Rights Amendment.

Furthermore, the PAG-01, as currently drafted, has the potential to allow projects that result in significant additional pollution from areas beyond the limited "earth disturbance area" of less than five acres that the Draft Permit authorizes. This is because the Draft Permit allows for stormwater from not only the earth disturbance area but the "project site" and "off-site support activities" as well. "Project site" includes the entire area of activity, development, lease or sale including the area of earth disturbance activity, the area planned for an earth disturbance activity, and other areas which are not subject to an earth disturbance activity.⁴ The Draft Permit defines "off-site support activities" as activities providing support for construction and earth disturbance activities covered by this General Permit. Part B.VII.E of the Draft Permit requires projects to be on the same or contiguous tax parcels except for off-site support activities. DEP should include additional controls or limitations or, more preferably, eliminate this potential loophole in the permit and to ensure that additional stormwater pollution is not allowed to enter our waters without meeting NPDES permit requirements.

Footnotes:

1 Robinson Township v. Commonwealth, 83 A.3d 901, 957 (Pa. 2013) (plurality) ("Robinson Twp.").

2 Robinson Twp., 83 A.3d at 959 (Pa. 2013).

3 25 Pa. Code § 92a.23(a).

4 25 Pa. Code § 102.1. **(11)**

Response: See DEP's responses to Comment Nos. 55 and 56. In addition, DEP does not consider its approach for off-site support activities or the project site to be a potential loophole. First, the amount of impervious surface across the entire project site is limited to 12% under PAG-01. DEP has made clarifications in the final PAG-01 to ensure that off-site support activity is included in the eligibility criteria. If the project site is

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greater than the area of earth disturbance, the project site area not subject to earth disturbance will not produce any additional stormwater runoff as a result of construction. Second, off-site support activities must, at a minimum, have appropriate E&S BMPs and, if there are impervious surfaces, PCSM BMPs. Given these considerations, it is unclear how the commenter arrives at a conclusion that there is the potential for significant additional pollution from the project site and off-site support activities. DEP disagrees with the assertion that it has no information upon which to evaluate cumulative impacts on receiving waters. DEP considered cumulative impacts in its stormwater analysis during the development of PAG-01 and has tailored the eligibility criteria and required BMPs accordingly.

65. Comment: DEP Must Ensure PAG-01 Complies with the Clean Water Act and Clean Streams Law.

DEP Must Ensure that Projects Do Not Cause or Contribute to Violations of Water Quality Standards.

A permit is not available for discharges that individually or cumulative have the potential to cause or contribute to a violation of an applicable water quality standard.⁵ The Draft Permit must include this condition in its eligibility criteria and then enforce it appropriately. The Draft Permit does note that permit coverage will be denied if “stormwater discharges [] individually or in combination with other similar discharges are or have the potential to be a contributor of pollution”⁶ or when “stormwater discharges [] are not in compliance or will not result in compliance with an applicable effluent limitation or water quality standard.”⁷ However, the Draft Permit provides no mechanism through which DEP will evaluate compliance with these conditions. Indeed, the attainment status of water quality standards of receiving waters is nowhere to be found on the Notice of Intent form.

For a body of water identified as impaired under section 303(d) of the CWA and for which a total maximum daily load (TMDL) has been developed, an NPDES permit may not be issued unless the permitting authority finds that the new source or discharge will not cause or contribute to the violation of water quality standards and will not violate the TMDL.⁸ This is generally accomplished by assurance that the discharge from the construction activity is in compliance with waste load allocations (WLAs) of the TMDL. Therefore, DEP should build into the Draft Permit requirements to ensure that permittees take actions necessary to meet the WLAs in approved TMDLs. Pollutant loading from construction sites are point sources requiring NPDES permits and are therefore part of the WLA and cannot be part of the non-point source load allocation for a waterway. Incorporating TMDL requirements into a construction stormwater permit would require post-construction stormwater management (PCSM) plans to be tailored to a specific site.⁹ PennFuture understands that this may be difficult in the context of a general permit and DEP may find it more appropriate to issue individual permits that are better tailored to meeting water quality standards.¹⁰ However, discharges of stormwater associated with construction activities are point sources, which must be responsive to waste load allocations in TMDLs.

Where TMDL waste load allocations are not in place, the burden rests on the Department to ensure that each permittee as well as the general permit’s implementation as a whole does not cause or contribute to violations of water quality standards. For example, where the cause of an impairment is sediment—a major pollutant of concern in the construction stormwater context—a construction site discharging into the water is contributing to the impairment. By definition, “impaired” waterbodies already receive too much pollution; the new construction permittee adding sediment is contributing to that impairment—thus necessarily violating the regulatory prohibition on contributing to an applicable water quality standard.¹¹ Thus, in order to rectify these problems in the Draft Permit, DEP must incorporate additional controls on permittees discharging to impaired waters in order to meet the regulatory obligations.

Moreover, DEP cannot avoid its responsibility to ensure that permittees do not cause or contribute to impairments by relying on the claiming a lack of a specific sediment criteria set by the Environmental Protection Agency (EPA) and not subsequently incorporated into DEP’s criteria.¹² Pennsylvania’s regulations do set a general water quality criteria which mandates the control of turbidity,¹³ and therefore DEP must protect its waters by controlling turbidity in permitting decisions. Even though DEP does not have a specific numeric limit for sediment, the Department has options for creating effective permits that comply with the CWA and CSL. For example, DEP could include a narrative prohibition on discharges that cause or contribute to water quality standard violations.

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Footnotes:

- 5 25 Pa. Code § 92a.54(a)(7), 40 C.F.R. § 122.4(i).
- 6 Draft Permit, Part A.I.D.1.
- 7 Draft Permit, Part A.I.D.6.
- 8 See 40 C.F.R. § 122.4(i).
- 9 PennFuture acknowledges that there may be difficulty in translating numeric waste load allocations from a TMDL into appropriate BMPs given the Draft Permit does not contain numeric effluent limits, but rather focuses on BMP implementation. However, discharges of stormwater associated with construction are point sources, which must be responsive to waste load allocations in TMDLs and thus are not considered part of a waterway's load allocation.
- 10 See EPA Revised memo Establishing Total Maximum Daily Load (TMDL) Waste Load Allocations (WLAs) for Storm Water Sources and NPDES Permit Requirements Based on those WLAs, Nov. 26, 2014, available at https://www.epa.gov/sites/production/files/2015-10/documents/epa_sw_tmdl_memo.pdf.
- 11 25 Pa. Code § 92a.54(a)(7).
- 12 The Department need not wait for EPA to set a sediment criteria before establishing its own.
- 13 25 Pa. Code § 93.6(b). **(11)**

Response: See DEP's responses to Comment Nos. 55 and 56. In addition, the PAG-01 General Permit prohibits the discharge of floating materials, scum, sheen, or substances that result in deposits in the receiving water, or foam, oil, grease, or substances that produce an observable change in the color, taste, odor or **turbidity** of the receiving water (emphasis added).

66. Comment: DEP Should Include Mandatory Monitoring Requirements in this New General Permit.

As the first iteration of this new general permit, the Draft Permit should include monitoring in order to evaluate the permit's effectiveness at its expiration. Without this evaluation, the Draft Permit is left devoid of the ability to assure that cumulatively permittees do not adversely affect our natural resources. As the Draft Permit is currently written, "DEP may require monitoring of stormwater discharges" ¹⁴ However, without assessment of potential cumulative impacts at the time permittees receive coverage (as described above) and no requirement to monitor within the permit, DEP will be left with no ability to assess the permit's effectiveness in complying with its legal obligations at the end of the permit's term. This is clearly insufficient. The Department should require more in order to evaluate the permits effectiveness and compliance with relevant law at the end of the permit term. ¹⁵

Footnotes:

- 14 Draft Permit, Part A.II.H (emphasis added).
- 15 Although 25 Pa. Code § 92a.61(b) gives DEP discretion in imposing reasonable monitoring requirements ("The Department may impose..." (emphasis added)), it is critical for the health of Pennsylvania's waters – and for DEP's compliance with the Environmental Rights Amendment – to require such monitoring in PAG-01. **(11)**

Response: See DEP's response to Comment No. 51.

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67. Comment: DEP Must Express All Permit Requirements in Clear, Specific, and Measurable Terms.

The Department must clarify vague terms such as “minimize,” “reasonable steps,” and similar language within the Draft Permit. The CWA does not allow for “self-regulation” by NPDES permittees. Rather, the permitting authority, not the permittee, must determine which pollution reduction measures are necessary to comply with applicable technology-based and water quality-based effluent limitations.¹⁶ In 2016, the U.S. Environmental Protection Agency (EPA) explained in a rulemaking on remand of the Small Municipal Separate Storm Sewer System (MS4) General Permits regulations that MS4 general permits must establish pollution control requirements that are “clear, specific, and measurable.”¹⁷ Although the rulemaking revised only the rules for Small MS4 General Permit, and does not specifically address NPDES general permits for stormwater discharges associated with construction activities (such as the Draft Permit), the same underlying principles of NPDES permitting apply to both.

In the preamble to the small MS4 rulemaking, EPA expounded at length on what it means to have “clear, specific, and measurable” permit requirements.¹⁸ EPA released with the final rule a “Compendium of Clear, Specific and Measurable Permitting Examples.”¹⁹ The preamble and Compendium provide examples both of what would be considered “clear, specific, and measurable,” and what would not. Provisions that fail the test include:

- Permit provisions that simply copy the language of the [] regulations verbatim without providing further detail on the level of effort required or that do not include the minimum actions that must be carried out during the permit term.
- Permit requirements that include “caveat” language, such as “if feasible,” “if practicable,” “to the maximum extent practicable,” and “as necessary” or “as appropriate” unless defined.
- Permit provisions that preface the requirement with non-mandatory words, such as “should” or “the permittee is encouraged to”
- Permit requirements that lack a measurable component. For instance, permit language implementing the construction minimum control measure that requires inspections “at a frequency determined by the permittee” based on several factors. This type of provision includes no minimum frequency that can be used to measure adequacy and, therefore, would not constitute a measurable requirement for the purposes of the rule.
- “Provisions that require the development of a plan . . . but does [sic] not include details on the minimum contents or requirements for the plan, or the required outcomes, deadlines, and corresponding milestones”²⁰

Many of the provisions in the Draft Permit suffer these defects or are otherwise so vague that they impermissibly defer to the permittee to determine what stormwater pollution control measures sufficiently meet Clean Water Act requirements. These include, for example:

- Part B.I.F.—“The permittee shall take all reasonable steps to minimize or prevent any discharge in violation of this permit that has a reasonable likelihood of adversely affecting human health or the environment.”
- Part B.VII.G.1.—“The permittee shall identify all deficiencies in E&S or PCSM Plan implementation on Visual Site Inspection Reports and document the corrective action that will be taken to mitigate the deficiency.”

Footnotes:

16 Environmental Defense Center v. EPA, 344 F.3d 832 (9th Cir. 2003); Waterkeeper Alliance v. EPA, 399 F.3d 486, 498-502 (2d Cir. 2005).

17 81 Fed. Reg. 89320 (Dec. 9, 2016).

18 Id. at 89334-37.

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19 The Compendium, which includes an introduction and three separate parts, can be found here: <https://www.epa.gov/npdes/municipal-sources-resources>. Part 1 covers the “six minimum control measures,” Part 2 covers post-construction standards, and Part 3 covers water quality-based effluent limitations. https://www.epa.gov/sites/production/files/2017-01/documents/final_compendium_intro_document_508.pdf.

20 81 Fed. Reg. at 89335. (11)

Response: DEP does not believe that the two examples referenced in the comment are vague. In addition, the actions a permittee could possibly take to prevent or correct non-compliance are too variable to identify in a general permit.

68. Comment: PCSM Plans Must Take Climate Change Into Account.

Part A.I.C.2. of the Draft Permit states that “[i]mplementation of [PCSM BMP] standards will satisfy the requirements of 25 Pa. Code § 102.8(g) to manage the net change in stormwater volume and water quality up to and including the 2-year/24-hour storm event” It is PennFuture’s understanding that in arriving at the applicable BMPs for this permit to comply with this standard, generally, the National Oceanic and Atmospheric Administration’s Atlas information, which is retrospective, was used in providing a standard deviation of historical 2-year/24-hour storm events. However, using this number does not account for the increased frequency and intensity of storm events resulting from climate change. Heavy rain events in the northeastern United States—including Pennsylvania—have increased 71% since the early 1990’s.²¹ Heavy rain fall over a short duration can present particular problems for stormwater runoff from exposed surfaces of construction sites, allowing it to collect significant sediment and other pollutants on its way to local waters. By only requiring that only the 2-year/24-hour storm to be managed, the Draft Permit provides the potential for significant impacts from stormwater runoff to go unregulated.²²

Footnotes:

21 Lara B. Fowler et al., Flood Mitigation for Pennsylvania’s Rural Communities: Community-Scale Impact of Federal Policies 14 (2018); D.J. Wuebbles et al., Climate Science Special Report: Fourth National Climate Assessment, Volume I 10 (2018) (“Heavy rainfall is increasing in intensity and frequency across the United States and globally and is expected to continue to increase. The largest observed changes in the United States have occurred in the Northeast.”).

22 Furthermore, engineers generally use the peak standard deviation number. In the absence of incorporating information regarding the likely size of future storms, in order to be more protective, the higher end of the standard deviation should be used. (11)

Response: The PAG-01 General Permit requires management of the net change up to and including the 2-year/24-hour storm event for volume and water quality and management of the net change for the 2-, 10-, 50-, and 100-year/24-hour storm events for rate, per the requirements of 25 Pa. Code §§ 102.8(g)(2) and (3). This is accomplished under PAG-01 by implementing the PCSM BMPs prescribed by the General Permit.

The 2-year/24-hour storm event is the performance standard codified in the 2010 Chapter 102 rulemaking (see 40 Pa.B. 4861) that permittees must meet to ensure that in-stream water quality is protected or maintained, as required by Pennsylvania’s antidegradation requirements. DEP codified the 2-year/24-hour event standard during the 2010 Chapter 102 rulemaking based on technical input, research, and peer-reviewed scientific studies, including several cited by the commenter. This storm event standard is also referenced in EPA’s Construction General Permit.

DEP and its contractor are planning to update the Stormwater BMP Manual based on the latest information on regional rainfall distributions, infiltration, and evapotranspiration, and plan to remove unintended barriers for green infrastructure. DEP is planning improvements to protocols for infiltration testing and construction inspections and the promotion of treatment train approaches for protecting vegetated and infiltration surfaces. These improvements are intended to ensure that green infrastructure BMPs function throughout all storm events,

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providing greater volume reduction and reducing maintenance requirements. Safety factors inherent in the design of these BMPs promote climate resilience.

- 69. Comment:** The definition section should explicitly define what is considered a “small construction activity.” Currently, the definition of “small construction activity” is buried within the definition for “stormwater associated with small construction activity.” As a new permit specifically designed for “small construction activity,” it is important to clearly define the term. **(11)**

Response: The definition of “small construction activity” is essentially contained in the definition of “stormwater associated with small construction activity” and DEP does not believe further clarification is necessary.

- 70. Comment:** Reconsider some of the authorized non-stormwater discharges in section III.B. For example, III.B.4. allows discharges of “[w]ater used to wash vehicles and equipment where cleaning agents are not used.” This is under inclusive and should contain language like III.B.6. which allows discharges of “[e]xternal building washdown where cleaning agents are not used and external surfaces do not contain hazardous substances.” The additional caveat prohibiting discharges containing hazardous substances is more comprehensive. **(11)**

Response: Vehicle surfaces are not expected to contain hazardous substances. In addition, DEP's list of authorized non-stormwater discharges is similar to the list in EPA's Construction General Permit.

- 71. Comment:** This permit should not apply to earth disturbance activities within a specified distance of waters of the Commonwealth. Earth disturbance activities physically alter the land and consequently affect the physiology of nearby waterbodies. Projects in close proximity to waterbodies have a higher likelihood of resulting in such impacts. Therefore, construction activities within a specified distance of waters of the Commonwealth should be required to apply for an individual permit. **(11)**

Response: See DEP's response to Comment No. 62.

- 72. Comment:** Pennsylvania's Stormwater Workgroup for Clean Water (Workgroup) thanks the Pennsylvania Department of Environmental Protection (Department or DEP) for the opportunity to provide comments on the draft PAG-01 NPDES General Permit for Stormwater Discharges Associated with Small Construction Activities.¹ The Workgroup is a coalition of citizen-based watershed and environmental groups from across the Commonwealth focused on protecting waterbodies from the effects of stormwater runoff. The Workgroup promotes effective stormwater management to benefit all of Pennsylvania's waterways and views construction stormwater permits as a critically important component in protecting receiving waters, and waterways downstream, from the impacts of development and redevelopment activities.

Workgroup members acknowledge that the Department's draft PAG-01 is, in part, a response to the regulated community's concerns about the length of permit approvals and costs. By example, a standardized suite of best management practices (BMPs) developed by the Department's technical contractor is in the proposed PAG-01, in lieu of the Chapter 102 requirements for site-specific stormwater analysis and post-construction stormwater management (PCSM) plan to be prepared by a trained professional.²

However, the PAG-01 must comply with the requirements of the Clean Water Act and Pennsylvania's Clean Streams Law, especially as the PAG-01 is expected to cover as many as half of all construction sites in Pennsylvania. The Workgroup provides the following recommendations on ways the final PAG-01 should be strengthened to prevent the impacts of stormwater pollution from construction sites from entering Pennsylvania's rivers and streams. It is imperative, when issued, that the final PAG-01 does not substitute water quality protections for convenience and cost-savings.

Footnotes:

- 1 The Pennsylvania Department of Environmental Protection. 2019. PAG-01 Authorization to Discharge under the National Pollutant Discharge Elimination System General Permit for Discharges of Stormwater

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Associated with Small Construction Activities. Available at: <http://www.depgreenport.state.pa.us/elibrary/GetDocument?docId=1496076&DocName=04%20DRAFT%20-%20SAMPLE%20PERMIT.PDF%20%20%3Cspan%20style%3D%22color%3Agreen%3B%22%3E%3C%2Fspan%3E%20%3Cspan%20style%3D%22color%3Ablue%3B%22%3E%3C%2Fspan%3E> .

- 2 The Pennsylvania Code. 25 Pa. Code § 102.8. 2010. Post-construction stormwater management requirements. Available at: <https://www.pacode.com/secure/data/025/chapter102/s102.8.html>. (12)

Response: DEP believes it has developed a technically sound and environmentally protective PAG-01 General Permit. It is unlikely, given the constraints in PAG-01, that as many as half of all construction sites in Pennsylvania would qualify for PAG-01. See also the response to Comment No. 55.

- 73. Comment:** Sites draining to impaired and/or Total Maximum Daily Load (TMDL) receiving waters should be ineligible for coverage under the PAG-01.

The site specifications and corresponding suite of BMPs established in the PAG-01 are a result of modeling analysis conducted for a range of sites. In cases where a proposed site will drain to a receiving water that is impaired and/or has an established TMDL, a site-specific stormwater analysis and PCSM plan should be required to ensure it does not cause or contribute to the impairment adding additional negative impacts. These sites should be required to conduct a site-specific stormwater analysis, as required under coverage in the PAG-02. (12)

Response: See DEP's responses to Comment Nos. 55 and 56.

- 74. Comment:** The Department must assess for the cumulative impacts resulting from PAG-01.

No two watersheds or proposed construction sites are alike. In locations where proposed sites will be in areas with a high percentage of impervious cover, adding even more impervious surface could have a significant impact on water quality. Likewise, areas experiencing high rates of development could experience significant rates of new impervious surface. As the fact sheet notes, 12% is the upper limit of impervious surface a watershed can possess until water quality effects are detrimental.³ The final permit must address how the Department will assess and correct for cumulative impacts to protect our waterways from increases in runoff from development and redevelopment.

Footnote:

- 3 The Pennsylvania Department of Environmental Protection. 2019. PAG-01 Authorization to Discharge under the National Pollutant Discharge Elimination System General Permit for Discharges of Stormwater Associated with Small Construction Activities Fact Sheet. Available at: <http://www.depgreenport.state.pa.us/elibrary/GetDocument?docId=1496077&DocName=05%20DRAFT%20-%20FACT%20SHEET.PDF%20%20%3Cspan%20style%3D%22color%3Agreen%3B%22%3E%3C%2Fspan%3E%20%3Cspan%20style%3D%22color%3Ablue%3B%22%3E%3C%2Fspan%3E> . (12)

Response: See DEP's responses to Comment No. 55 and 56. In addition, DEP generally does not believe that proposed sites in areas with a high percentage of impervious cover will be eligible for PAG-01 because of the constraint of no more than 12% impervious across the entire project site.

- 75. Comment:** The performance of the permit must be assessed no longer than 5 years after the PAG-01 is effective.

In addition to assessing cumulative impacts, the Department must assess if there are negative impacts to water quality due to the new permitting option available through the PAG-01. This analysis must be conducted prior to reissuing an update to the PAG-01. Requiring monitoring and reporting in the first iteration of this new general

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permit is the only way to ensure the model-tested BMPs are, in fact, working. The Department will benefit from this real data in order to refine the next version of PAG-01. (12)

Response: DEP conducts assessments of water quality on an ongoing basis. The results of these assessments help inform the design and administration many permits issued by DEP, including permits for discharges of stormwater associated with construction activities.

76. Comment: The final PAG-01 should require soil infiltration testing for all PCSM areas.

The draft PAG-01 specifies that applicants use the Natural Resources Conservation Service's (NRCS) Soil Survey data, for Hydrologic Soil Group (HSG) classification, to determine a site's infiltration capacity. We recommend all PCSM areas be tested. If a site has HSG A or B soils, an infiltration test, with specifications described in the final permit, should be conducted to ensure water infiltrates as indicated in the NRCS Soil Survey. For sites containing HSG C or D soils, the final permit should include additional language that an infiltration test must be conducted by the soil scientist after soil amendments are completed to ensure proper infiltrate rates by the PCSM BMP. (12)

Response: DEP has finalized the PAG-01 General Permit with a requirement for infiltration testing when rain gardens or dry wells are proposed. DEP is not requiring infiltration testing following soil amendments because such protocols are not identified in the BMP Manual, but a professional with knowledge of soils science must be utilized to confirm the adequacy of such amendments.

77. Comment: Waivers should not be granted for pre-application meetings between the applicant and DEP and/or the County Conservation District (CCD).

Pre-application meetings provide an important opportunity for the applicant to discuss the project with the DEP or CCD staff who are responsible for reviewing the permit application. These meetings are an important early conversation that could ultimately lead to satisfactory application materials and faster permit approval times, because the applicant will understand better what is needed for approval. This also allows the applicant to discuss which type of permit is best suited for the project: PAG-01, PAG-02, or Individual. Furthermore, this would allow DEP and/or CCDs to conduct analysis to minimize cumulative impacts within a watershed. (12)

Response: See DEP's response to Comment No. 52.

78. Comment: Applications for coverage in addition to permit approvals should be published in the Pennsylvania Bulletin.

To ensure transparency and accountability to the public, Notices of Intent (NOIs) for permit coverage for PAG-01 permits should be published in the Pennsylvania Bulletin. The Department anticipates that approximately, one-third to half of all construction permits may be eligible for the PAG-01. The public must be informed of these, projects, their locations, and the best management practices the project applicants intend to take, and be provided the opportunity to provide comment on proposed projects. The PAG-01 Fact Sheet states that only permit approvals will be published in the Pennsylvania Bulletin.⁴

Footnote:

4 The Pennsylvania Department of Environmental Protection. 2019. PAG-01 Authorization to Discharge under the National Pollutant Discharge Elimination System General Permit for Discharges of Stormwater Associated with Small Construction Activities Fact Sheet. Available at: <http://www.depgreenport.state.pa.us/elibrary/GetDocument?docId=1496077&DocName=05%20DRAFT%20-%20FACT%20SHEET.PDF%20%20%3Cspan%20style%3D%22color%3Agreen%3B%22%3E%20COMMENTS%20DUE%20OCTOBER%2028%2C%202019%3C%2Fspan%3E%20%3Cspan%20style%3D%22color%3Ablue%3B%22%3E%3C%2Fspan%3E>. (12)

Response: See DEP's response to Comment No. 53.

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79. Comment: Restoration projects may need site specific stormwater analysis to ensure they do not increase stormwater runoff to the receiving water.

The Site Restoration category includes projects that may clear and grade land to create parks and/or athletic fields. The PAG-01 includes language that exempts projects from altering hydrology from per- to post-construction, however no further instructions are provided to ensure there is no net negative impact from the restoration activity. The final PAG-01 must include instructions on how applicants will determine and document that Site Restoration projects do not impact water quality. Furthermore, there are no setbacks specified for sites adjacent to a waterbody. We recommend no new impervious surfaces or compacted trails and/or walking paths be allowed in proximity to a stream or to impede hydrologic connection to the floodplain and the stream. The final PAG-01 must be consistent with Pennsylvania regulation and guidance that protects and restores riparian buffers. (12)

Response: See DEP's response to Comment No. 63.