Permit Fact Sheet

for the General Discharge Permit For Stormwater Associated with Construction Activity Maryland General Permit No. 20CP0000, NPDES Permit Number MDRC0000

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Maryland regulations (COMAR 26.08.04.08) specify the process required for issuing General Permits and their renewals. The renewal process includes publication of a notice that the Maryland Department of the Environment (Department) has drafted a Tentative Determination and Fact Sheet, and allows the public 30 days to comment on the Tentative Determination and Fact Sheet before the Department issues the Final Determination. Maryland Code, Environment § 1-606 requires the Department to extend the public comment period to a total of 90 days on request by a person. The Department assumes that, for a permit like this, a request to extend the public comment period would be made; therefore, the public notice and comment period for this permit is 90 days.

Maryland regulations also allow for a public hearing on a draft permit (i.e., Tentative Determination) when a written request has been made. It is the Department's intent to provide and schedule online meetings for the exchange of information in hopes of achieving an equivalent outcome to the process that would occur through an in person meeting or hearing. Nevertheless, current rules provide the opportunity for traditional meeting and or hearing unless waived by a requesting party or where interim rules are declared applicable during the COVID-19 emergency declaration for Maryland.

The public notice is published in the Maryland Register and in newspapers around the State. The Department must review and respond to comments on the Tentative Determination. With this background, once the Department has created a Tentative Determination, public participation rules require the Department to publish the Tentative Determination in the Maryland Register and newspapers. The Department also sends a copy of the notice to the permittees and interested parties and will be posted to our website https://mdewwp.page.link/CGP. The dates of any scheduled public hearing and the specific end date of the comment period are included in the notice. An interest list will also be established for those interested in online opportunities for meetings and for online opportunities to present comments for the record. Comments can also be mailed in written form or emailed to the Department to Paul Hlavinka's attention.

Contents

I. Background

The Maryland Department of the Environment (MDE, hereinafter referred to as the "Department") is reissuing the National Pollutant Discharge Elimination System (NPDES) GENERAL PERMIT FOR STORMWATER ASSOCIATED WITH CONSTRUCTION ACTIVITY (Maryland General Permit No. 20-CP), which authorizes the discharges of stormwater associated with construction activity, to Waters of this State.

The Maryland General Permit No. 20-CP replaces the previous construction stormwater general permit, Maryland General Permit No. 14-GP, which expired on December 31, 2019. This Fact Sheet describes the Maryland General Permit No. 20-CP. The slight change in the permit designation from GP to CP, acknowledges that there are many general permits, but this permit is specific to construction.

A. Clean Water Act

Section 301(a) of the Clean Water Act (CWA) provides that "the discharge of any pollutant by any person shall be unlawful" unless the discharge is in compliance with certain other sections of the Act. 33 U.S.C. 1311(a). The CWA defines "discharge of a pollutant" as "(A) any addition of any pollutant to navigable waters from any point source, (B) any addition of any pollutant to the waters of the contiguous zone or the ocean from any point source other than a vessel or other floating craft." 33 U.S.C. 1362(12). A "point source" is any "discernible, confined and discrete conveyance" but does not include "agricultural stormwater discharges and return flows from irrigated agriculture." 33 U.S.C. 1362(14). The term "pollutant" includes, among other things, "garbage… chemical wastes, biological materials …and industrial, municipal, and agricultural waste discharged into water."

One way a person may discharge a pollutant without violating the section 301 prohibition is by obtaining authorization to discharge (referred to herein as "coverage") under a NPDES permit issued pursuant to section 402 of the CWA (33 U.S.C. 1342).

1. NPDES Permits

Congress passed the Federal Water Pollution Control Act of 1972 (Public Law 92-500, October 18, 1972) (hereinafter the "Clean Water Act" or "CWA"), 33 U.S.C. 1251 et seq., with the stated objectives to "restore and maintain the chemical, physical, and biological integrity of the Nation's waters." Section 101(a), 33 U.S.C. 1251(a). To achieve this goal, the CWA provides that "the discharge of any pollutant by any person shall be unlawful" except in compliance with other provisions of the statute. CWA section 301(a). 33 U.S.C. 1311. The CWA defines "discharge of a pollutant" broadly to include "any addition of any pollutant to navigable waters from any point source." CWA section 502(12). 33 U.S.C. 1362(12). EPA is authorized under CWA section 402(a) to issue a National Pollutant Discharge Elimination System (NPDES) permit for the discharge of any pollutant from a point source. These NPDES permits are issued by EPA regional offices or NPDES- authorized state or tribal agencies. Since 1972, EPA and the authorized states have issued NPDES permits to thousands of dischargers, including industrial (e.g., manufacturing, energy and mining facilities) and municipal (e.g., sewage treatment plants) facilities. As required under Title III of the CWA, EPA has promulgated Effluent Limitations Guidelines (ELGs) and New

Source Performance Standards (NSPS) for many industrial point source categories, and these requirements must be incorporated into NPDES permits. 33 U.S.C. 1311(b). The Water Quality Act (WQA) of 1987 (Public Law 100-4, February 4, 1987) amended the CWA, adding CWA section 402(p), requiring implementation of a comprehensive program for addressing stormwater discharges. 33 U.S.C. 1342(p).

2. Clean Water Act Stormwater Program

Prior to the Water Quality Act of 1987, there were numerous questions regarding the appropriate means of regulating stormwater discharges within the NPDES program due to the serious water quality impacts of stormwater discharges, the variable nature of stormwater, and the large number of stormwater point sources. EPA undertook multiple regulatory actions in an attempt to address these unique discharges. Congress, with the addition of section 402(p), established a structured and phased approach to address stormwater discharges and fundamentally altered the way stormwater is addressed under the CWA as compared with other point source discharges of pollutants. Section 402(p)(1) created a temporary moratorium on NPDES permits for point source stormwater discharges, except for those listed in section 402(p)(2), including dischargers already required to have a permit and discharges associated with industrial activity.

In 1990, pursuant to section 402(p)(4), EPA promulgated the Phase I stormwater regulations for those stormwater discharges listed in 402(p)(2). See 55 FR 47990 (November 16, 1990). The Phase I regulations required NPDES permit coverage for discharges associated with industrial activity and from "large" and "medium" municipal separate storm sewer systems (MS4s). CWA section 402(p)(2). As part of that rulemaking, EPA interpreted stormwater "discharges associated with industrial activity" to include stormwater discharges associated with "construction activity" as defined at 40 CFR 122.26(b)(14)(x). See 55 FR 48033- 34. As described in the Phase I regulations, dischargers must obtain authorization to discharge (or "permit coverage"), including discharges associated with construction activity, including clearing, grading, and excavation, if the construction activity:

- will result in the disturbance of five acres or greater; or
- will result in the disturbance of less than five acres of total land area that is part of a larger common plan of development or sale if the larger common plan will ultimately disturb five acres or greater. See 40 CFR 122.26(b)(14)(x) and (c)(1).

Section 402(p)(5) and (6) of the CWA establishes a process for EPA to evaluate potential sources of stormwater discharges not included in the Phase I regulations and to designate discharges for regulation in order to protect water quality. Section 402(p)(6) of the CWA instructs EPA to "issue regulations…which designate stormwater discharges, other than those discharges described in [section 402(p)(2)], to be regulated to protect water quality and shall establish a comprehensive program to regulate such designated sources." In 1999, pursuant to the broad discretion granted to the agency under section 402(p)(6) of the CWA, EPA promulgated the Phase II stormwater regulations that designated discharges associated with "small" construction activity and "small" MS4s. 64 FR 68722 (December 8, 1999). Per 40 CFR 122.26(b)(15), NPDES permit coverage is required for discharges associated with "small" construction activity, including clearing, grading, and excavation, if the construction activity:

- will result in land disturbance of equal to or greater than one acre and less than five acres; or

- will result in disturbance of less than one acre of total land area that is part of a larger common plan of development or sale if the larger common plan will ultimately disturb equal to or greater than one and less than five acres.

EPA continues to have discretionary authority under section 402(p)(6) of the CWA to designate additional stormwater discharges for regulation under the CWA in order to protect water quality. EPA has established an adjudicatory process for exercising discretion to designate and require NPDES permits for unregulated stormwater discharges. See 40 CFR 122.26(a)(9)(i)(C)-(D); see also Envt Defense Ctr. v. EPA, 344 F.3d 832, 873-76 (9th Cir. 2003).

3. NPDES Permits for Stormwater Discharges Associated With Construction Activity

The NPDES regulations provide two options for obtaining authorization to discharge or "permit coverage": general permits and individual permits. A brief description of these types of permits as they apply to construction and development (C&D) sites follows:

a. General NPDES Permits.

The vast majority of discharges associated with construction activity are covered under NPDES general permits. EPA, states, and tribes use general permits to cover a group of similar dischargers under one permit. See 40 CFR 122.28. General permits simplify the process for dischargers to obtain authorization to discharge, provide permit requirements for any eligible discharger that files a Notice of Intent (NOI) to be covered, and reduce the administrative workload for NPDES permitting authorities. General permits, including the fact sheet describing the rationale for permit conditions, are issued by NPDES permitting authorities after an opportunity for public review of and comment on the proposed general permit. Typically, to obtain authorization to discharge under a construction general permit, a discharger (any operators of the construction site; typically, a developer, builder, and/or contractor) submits to the permitting authority an NOI to be covered under the general permit. An NOI is not a permit or a permit application (see Texas Independent Producers and Royalty Owners Ass'n v. EPA, 410 F.3d 964, 977-78 (7th Cir. 2005)), but by submitting the NOI, the discharger asserts and acknowledges that it is eligible for coverage under the general permit and that it agrees to the conditions in the published general permit. Discharges associated with the construction activity are authorized consistent with the terms and conditions established in the general permit.

After reviewing information regarding permit eligibility contained in the NOI, EPA, states and tribes may notify a construction site operator that it must, instead, apply for an individual permit if the permitting authority determines that the operator does not meet the eligibility conditions for coverage under the general permit. Examples of situations that might trigger such a determination are when the proposed discharges will not meet applicable water quality standards, or when they may adversely affect a Federally listed threatened or endangered species. In some cases, the permitting authority may allow the operator to proceed with coverage under the general permit provided additional control measures

designed to address the specific issue at hand are implemented.

b. EPA Construction General Permit (CGP).
Since 1992, EPA has issued a series of Construction General Permits (CGPs) that cover areas where EPA is the NPDES permitting authority. At present, EPA issues construction stormwater permits in four states (Massachusetts, New Hampshire, New Mexico, and Idaho), the District of Columbia, Puerto Rico and all other U.S. territories with the exception of the Virgin Islands. EPA also issues NPDES permits for: (1) construction projects undertaken by Federal Operators in Colorado, Delaware, Idaho, Vermont, and Washington; (2) most tribal lands; and (3) a couple of other specifically designated activities in specific states (e.g., oil and gas activities in Texas and Oklahoma).

c. MDE Construction General Permit (MDRC0000/20CP0000).
Maryland is a state with authorization and the responsibility to issue NPDES permits within the State. Maryland Department of the Environment (MDE or "the Department") issues these NPDES permits. MDE issued its first NPDES general permit for stormwater associated with construction activity in 1993(NPDES number MDRC0000), and relied on the State's established erosion and sediment control and stormwater management programs discussed below. This permit was required for all construction activity disturbing five acres or more. MDE reissued the general permit in 1997 and 2003. In accordance with EPA's Phase II stormwater regulations, the 2003 general permit was required for all construction activity disturbing one acre or more. MDE reissued a subsequent general permit on March 31, 2008, which became effective on July 13, 2009. MDE reissued the 2009 general permit (NDPES number MDRC0000/State Number 14GP0000) as of January 1, 2014, and terminated the 2009 general permit effective December 31, 2014. The 2014 general permit took effect January 1, 2015, and expired December 31, 2019. This renewal will be NPDES number MDRC0000/State Number 20CP0000.

d. Maryland's Soil Erosion and Sediment Control and Stormwater Management Programs.
This general permit contains numerous references to Maryland state standards and regulations regarding soil erosion and sediment control (ESC) and post-construction stormwater management requirements (Stormwater Management Plans or SWM Plans), which are equivalent to or exceed standards described in the CFR and EPA's current General Permit for Stormwater Associated with Construction Activity. Maryland's Erosion Control Law and regulations specify the general provisions for program implementation; provisions for delegation of enforcement authority; requirements for erosion and sediment control ordinances; exemptions from plan approval requirements; requirements for training and certification programs; criteria for plan submittal, review, and approval; procedures for inspection and enforcement; and applicant responsibilities. Clearly defining minimum standards is essential to make erosion and sediment control work. MDE has established minimum criteria for effective erosion and sediment control practices. The 2011 Standards and Specifications for Soil Erosion and Sediment Control are incorporated by reference into State regulations and serve as the official guide for erosion and sediment control principles, methods, and practices. Further information about these updated Standards and Specifications is available on MDE's Website. Under the Erosion and Sediment Control Regulations at COMAR 26.17.01.08.G, some sites meeting certain grandfathering conditions

may continue to operate under previously approved plans meeting the 1994 Standards and Specifications for Soil Erosion and Sediment Control.

Maryland's Stormwater Management Act was passed by the Maryland General Assembly in 1982. The primary goal of the State and local programs established by the Act is to "maintain after development conditions, as nearly as possible, the predevelopment runoff characteristics." This program covers the permanent stormwater Best Management Practices installed on the developed site, rather than the controls used during construction activities. On April 24, 2007, Governor Martin O'Malley signed the "Stormwater Management Act of 2007" (Act), which became effective on October 1, 2007. The Act requires that environmental site design (ESD) be implemented to the maximum extent practicable through the use of nonstructural best management practices and other better site design techniques. MDE has developed guidance including changes to regulation and a supplement to the Maryland Stormwater Design Manual for ESD (https://mdewwp.page.link/MDSWDesign).

Applicants for the General Permit include information on their NOIs listing the stormwater BMPs expected to be used at the time of application. The General Permit requires that permittees obtain approval (from the appropriate approval authority, such as a county government) for the Stormwater Management Plan prior to beginning earth disturbance, unless exempt or waived by the approval authority.

e. Individual NPDES Permits.
A permitting authority may require any construction site to apply for an individual permit rather than using the general permit. Likewise, any discharger may apply to be covered under an individual permit rather than seek coverage under an otherwise applicable general permit. See 40 CFR 122.28(b)(3). Unlike a general permit, an individual permit is intended to be issued to one permittee, or a few co-permittees. Individual permits for stormwater discharges from construction sites are rarely used, but when they are, they are most often used for very large projects or projects located in sensitive watersheds. EPA estimates that less than one half of one percent (< 0.5%) of all construction sites in the country are covered under individual permits. In Maryland, the issues related to large projects or sensitive watersheds are primarily addressed through specific controls on the E&SC plans.

4. Technology-Based Effluent Limitations Guidelines and Standards in NPDES Permits

Effluent limitations guidelines (ELGs) and new source performance standards (NSPSs) are technology-based effluent limitations under CWA sections 301 and 306 for categories of point source discharges. These effluent limitations, which can be either numeric or non-numeric, along with water quality-based effluent limitations, if necessary, must be incorporated into NPDES permits, as appropriate. ELGs and NSPSs are based on the degree of control that can be achieved using various levels of pollutant control technology as defined in Subchapter III of the CWA and summarized as follows:

a. Best Practicable Control Technology Currently Available (BPT).
The CWA requires EPA to specify BPT effluent limitations for conventional, toxic, and nonconventional pollutants. In doing so, EPA must determine what level of control is technologically available and economically practicable. CWA section 301(b)(1)(A). In

specifying BPT, EPA must look at a number of factors. EPA considers the total cost of application of technology in relation to the effluent reduction benefits to be achieved from such application. The agency also considers the age of the equipment and facilities, the process employed and any required process changes, engineering aspects of the application of the control technologies, non-water quality environmental impacts (including energy requirements), and such other factors as the Administrator deems appropriate. CWA section 304(b)(1)(B).

b. Best Available Technology Economically Achievable (BAT).
BAT effluent limitations are applicable to toxic (priority) and nonconventional pollutants. EPA has identified 65 pollutants and classes of pollutants as toxic pollutants, of which 126 specific pollutants have been designated priority toxic pollutants. See 40 CFR 401.15 and 40 CFR part 423, Appendix A. In general, BAT represents the best available performance of facilities through application of the best control measures and practices economically achievable including treatment techniques, process and procedure innovations, operating methods, and other alternatives within the point source category. CWA section 304(b)(2)(A). The factors EPA considers in assessing BAT include the cost of achieving BAT effluent reductions, the age of equipment and facilities involved, the processes employed, the engineering aspects of the control technology, potential process changes, non-water quality environmental impacts (including energy requirements), and such factors as the Administrator deems appropriate. CWA section 304(b)(2)(B).

c. Best Conventional Pollutant Control Technology (BCT).
The 1977 amendments to the CWA required EPA to identify effluent reduction levels for conventional pollutants associated with BCT for discharges from existing point sources. BCT is not an additional limitation, but replaces Best Available Technology (BAT) for control of conventional pollutants. In addition to other factors specified in CWA section 304(b)(4)(B), the Act requires that EPA establish BCT limitations after consideration of a two- part "costreasonableness" test. EPA explained its methodology for the development of BCT limitations in July 1986. 51 FR 24974 (July 9, 1986). Section 304(a)(4) designates the following as conventional pollutants: biochemical oxygen demand (BOD5), total suspended solids (TSS), fecal coliform, pH, and any additional pollutants defined by the Administrator as conventional. See 40 CFR 401.16. The Administrator has designated oil and grease as an additional conventional pollutant. 44 FR 44501 (July 30, 1979). CWA section 304(b)(4)(B).

d. Best Available Demonstrated Control Technology (BADT) for New Source Performance Standards (NSPS).
NSPS apply to all pollutants and reflect effluent reductions that are achievable based on the BADT. New sources, as defined in CWA section 306, have the opportunity to install the best and most efficient production processes and wastewater treatment technologies. As a result, NSPS should represent the greatest degree of effluent reduction attainable through the application of the best available demonstrated control technology. In establishing NSPS, CWA section 306 directs EPA to take into consideration similar factors that EPA considers when establishing BAT, namely the cost of achieving the effluent reduction and any non-water quality, environmental impacts and energy requirements. CWA section 306(1)(B). NPDES permits issued for construction stormwater discharges are required under Section 402(a)(1)

of the CWA to include conditions for meeting technology-based ELGs established under Section 301 and, where applicable, any NSPS established under Section 306. Once an ELG or NSPS is promulgated in accordance with these sections, NPDES permits must incorporate limits based on such limitations and standards. See 40 CFR 122.44(a)(1). Prior to the promulgation of national ELGs and/or NSPS, permitting authorities must establish and include in NPDES permits technology- based effluent limitations case-by-case based on their best professional judgment. See CWA section 402(a)(1)(B); 125.3(a)(2)(ii)(B).

5. EPA's Construction and Development Effluent Limitations Guidelines and New Source Performance Standards

On December 1, 2009, EPA promulgated ELGs and NSPSs to control the discharge of pollutants from construction sites. See 74 Fed. Reg. 62996, and 40 CFR 450.21. These requirements, known as the "Construction and Development Rule" or "C&D rule," became effective on February 1, 2010.

Following the promulgation of the C&D rule in 2009, several parties filed petitions for review of the final rule, identifying potential deficiencies with the dataset that the EPA used to support its decision to adopt a numeric turbidity limitation as well as other issues. On March 6, 2014, pursuant to a settlement agreement to resolve the litigation, EPA finalized amendments to the C&D rule that withdrew the numeric turbidity limitation and monitoring requirements, and also provided clarification regarding several other requirements of the rule. See 79 Fed. Reg. 12661 and 80 Fed. Reg. 25235. MDE issued the 14GP after these C&D rule requirements were available and incorporated them into the 14GP permit. Therefore, the new 20-CP continues to include the requirements from the C&D rule and is consistent with the required Effluent Limitations Guidelines. There are cases within the Fact Sheet where the Department has found portions of the C&D rule that were implemented by EPA in its CGP, that were not included in Maryland's 14-GP, and as a result we are now incorporating them into the 20-CP.

a. Summary of C&D Rule Requirements

The C&D rule requirements include non-numeric effluent limitations that apply to all permitted discharges from construction sites (40 CFR 450.21). The effluent limitations are structured to require construction operators to first prevent the discharge of sediment and other pollutants through the use of effective planning and erosion control measures; and second, to control discharges that do occur through the use of effective sediment control measures. Operators must implement a range of pollution control and prevention measures to limit or prevent discharges of pollutants, including those from dry weather discharges as well as wet weather (i.e., stormwater).

The non-numeric effluent limitations are designed to prevent the mobilization and stormwater discharge of sediment and sediment-bound pollutants, such as metals and nutrients, and to prevent or minimize exposure of stormwater to construction materials, debris and other sources of pollutants on construction sites. In addition, these non-numeric effluent limitations limit the generation of dissolved pollutants, such as nutrients, organics, pesticides, herbicides and metals that may be present naturally in the soil on construction sites, such as arsenic or selenium, or may have been contributed by previous activities on the site such as agriculture or industrial activity. These pollutants, once mobilized by rainfall and stormwater, can detach from the soil particles and become dissolved pollutants. Once dissolved, these pollutants would not be

removed by down-slope sediment controls. Source control through minimization of soil erosion is therefore the most effective way of controlling the discharge of these pollutants.

b. The C&D rule's non-numeric effluent limits are as follows (see 40 CFR 450.21):

1. Erosion and Sediment Controls

   Operators must design, install and maintain effective erosion controls and sediment controls to minimize the discharge of pollutants. At a minimum, such controls must be designed, installed and maintained to:

   i. Control stormwater volume and velocity to minimize soil erosion in order to minimize pollutant discharges;
   ii. Control stormwater discharges, including both peak flowrates and total stormwater volume, to minimize channel and streambank erosion and scour in the immediate vicinity of discharge points;
   iii. Minimize the amount of soil exposed during construction activity;
   iv. Minimize the disturbance of steep slopes;
   v. Minimize sediment discharges from the site. The design, installation and maintenance of erosion and sediment controls must address factors such as the amount, frequency, intensity and duration of precipitation, the nature of resulting stormwater discharge, and soil characteristics, including the range of soil particle sizes expected to be present on the site;
   vi. Provide and maintain natural buffers around Waters of this State, direct stormwater to vegetated areas and maximize stormwater infiltration to reduce pollutant discharges, unless infeasible;
   vii. Minimize soil compaction. Minimizing soil compaction is not required where the intended function of a specific area of the site dictates that it be compacted; and
   viii. Unless infeasible, preserve topsoil. Preserving topsoil is not required where the intended function of a specific area of the site dictates that the topsoil be disturbed or removed.

2. Soil Stabilization Requirements

   Operators must, at a minimum, initiate soil stabilization measures immediately whenever any clearing, grading, excavating or other earth disturbing activities have permanently ceased on any portion of the site, or temporarily ceased on any portion of the site and will not resume for a period exceeding 14 calendar days. In arid, semiarid, and drought-stricken areas where initiating vegetative stabilization measures immediately is infeasible, alternative stabilization measures must be employed as specified by the permitting authority. Stabilization must be completed within a period of time determined by the permitting authority. In limited circumstances, stabilization may not be required if the intended function of a specific area of the site necessitates that it remain disturbed.

3. Dewatering Requirements

   Operators must minimize the discharge of pollutants from dewatering trenches and excavations. Discharges are prohibited unless managed by appropriate controls.

4. Pollution Prevention Measures

Operators must design, install, implement, and maintain effective pollution prevention measures to minimize the discharge of pollutants. At a minimum, such measures must be designed, installed, implemented and maintained to:

i. Minimize the discharge of pollutants from equipment and vehicle washing, wheel wash water, and other wash waters. Wash waters must be treated in a sediment basin or alternative control that provides equivalent or better treatment prior to discharge;
ii. Minimize the exposure of building materials, building products, construction wastes, trash, landscape materials, fertilizers, pesticides, herbicides, detergents, sanitary waste and other materials present on the site to precipitation and to stormwater. Minimization of exposure is not required in cases where the exposure to precipitation and to stormwater will not result in a discharge of pollutants, or where exposure of a specific material or product poses little risk of stormwater contamination (such as final products and materials intended for outdoor use); and
iii. Minimize the discharge of pollutants from spills and leaks and implement chemical spill and leak prevention and response procedures.

5. Prohibited Discharges

The following discharges from C&D sites are prohibited:

i. Wastewater from washout of concrete, unless managed by an appropriate control;
ii. Wastewater from washout and cleanout of stucco, paint, form release oils, curing compounds and other construction materials;
iii. Fuels, oils, or other pollutants used in vehicle and equipment operation and maintenance; and
iv. Soaps or solvents used in vehicle and equipment washing.

6. Surface Outlets

When discharging from basins and impoundments, operators must utilize outlet structures that withdraw water from the surface, unless infeasible.

6. Review of File and Input from Listening Sessions

When considering the renewal, the Department held listening sessions with various groups to identify gaps and opportunities for improvements. We also reviewed EPA's input from their oversight Permit Quality Reviews (PQR). The consistent items that needed to be addressed are summarized here. Changes through the permit and discussed in this Fact Sheet are a result of this effort. Areas for improvement:

1) The 14-GP makes frequent reference to Maryland Regulations, without including the actual language in the permit. EPA recommended moving more of the language into the permit so that operators would have a better chance of meeting all State Requirements. [EPA PQR]
2) The 14-GP doesn't provide limits or language regarding the use of Chemical Additives. [CBP Urban Stormwater Workgroup]

The Department is aware of the significant interest and need to use polymers and other chemical additives for treatment of turbid waters that result from runoff in certain soil profiles in Maryland. It was 2014, when the existing 14-GP was being issued, when the Chesapeake Bay Program (CBP) partnership's Urban Stormwater Workgroup provided recommendations regarding E&SC practices to address pollutants released into the Bay [https://www.chesapeakebay.net/channel_files/21146/attachment_d--final_long_draft_esc_expert_panel_01072014.pdf], which reviewed all the Chesapeake Bay states' programs, and identified the use of chemical additives as an essential component of stormwater treatment to address pollutants entering the local streams and larger watershed. Over the years, some Maryland Counties had actually taken the lead to start approving chemicals on their own without any solid guidance from the State. It is the Department's position that we needed to take leadership in this regard and provide permit limits and guidance for the safe use of these products. When reviewing options, the Department held an internal workgroup to examine options and explore best practices. As noted later in this Fact Sheet, a rationale was settled on that is consistent with EPA's implementation, and taking some of the ideas from other states, to address this need.

Figure 1 - Stormwater BMP with Turbid Waters

3) The permit does not contain language of how to handle discharges to sensitive waters (antidegradation). [EPA PQR, Center for Progressive Reform, Chester River Keeper, Chesapeake Bay Foundation]
4) The permit should include requirements to target discharges to waters with PCB impairments, similar to EPA CGP. [EPA PQR, Maryland Building Industry Association]
5) Stormwater Design Standards should acknowledge changes in climate and the resulting changes in frequency of storms. [Center for Progressive Reform, Chester Riverkeeper]

   This item in particular is hard to address by the permit alone. The permit refers to the Design Manual, which is where changes would be made to address design standards.

6) Petitions by Concerned Citizens and the Public Comment Period. [Center for Progressive Reform]

The suggestions to allow more input will be afforded to citizens related to the newly required Antidegradation Checklists, however those will be based either on the Water Quality-Based or Technology-Based requirements found in the permit. The other addition to the permit is a requirement for specific sites to maintain a SWPPP and related records. Although these are not readily available by citizens, they are to be on-site for an inspector to evaluate and make recommendations based on citizen complaints.

7) Fees [Center for Progressive Reform]

   The suggestion that fees should be increased to support the Department's efforts is something that would need to be addressed through regulation. The permit would allow for an increase, only if the regulation is changed. Thus the reference in that section to the regulation.

8) Impaired Waters and the need for Water Quality-Based limits. [Center for Progressive Reform, Chester River Keeper, Chesapeake Bay Foundation]
9) The need for SWPPPs to address issues beyond the E&SC Plan. [Center for Progressive Reform, Maryland Building Industry Association, Chesapeake Bay Foundation]
10) Large and Complex Construction Projects should require better coordination and a SWPPP condition. [Center for Progressive Reform]
11) Listing of Non-Stormwater Discharges contains gaps which could be addressed through considerations of the EPA CGP. [Maryland Building Industry Association]
12) Inspection improvements should include an option to perform more frequent inspections in lieu of the existing once a week and once after storm event. [Maryland Building Industry Association]
13) eNOI should include more information about work at a site (polymer use, Tier II). [Center for Progressive Reform, Maryland Building Industry Association]
14) There were many questions taken by the help desk for the eNOI system that will need to be addressed so that the electronic system uses terminology that is consistent with the Permit. Differences in the past have caused confusion for roles such as a signatory vs responsible party, use of the term 'person' without the COMAR definition, and Co-Permittee, and transfers.
15) The permit uses the term 'person' instead of 'Operator', 'permittee' in the third person vs 'You' or 'Your', and uses the term 'Director' instead of the term 'Department'. Changes were made throughout to make the permit consistent with the Department's other General Permits.
16) The C&D Rule requirements were largely incorporated into the 14-GP. However, the requirement to provide and maintain natural buffers around Waters of this State were missed. In this renewal buffers are addressed for tributaries.

B. Summary of Significant Changes to Permit

The 14-GP's conditions are retained in the 20-CP, including the required C&D rule requirements. The permit relies on Maryland's effective Soil Erosion and Sediment Control and Stormwater Management

Programs, to address the primary pollutants (namely sediments) resulting from construction activities. The permit requires a stormwater management plan, self-inspection and record keeping. The changes in the renewal address certain gaps related to sensitive waters (primarily Tier II waters), pollutants other than sediment and the use of chemical additives to address turbidity. The permit also addresses a common point of confusion, which relates both to common plans of development, where areas of responsibility require a SWPPP, and the use of transfers for more than changes in ownership. To incorporate these permit limits, the Department reviewed strategies employed by EPA CGP and neighboring state programs related to required controls and SWPPP provisions. The chosen permit organization necessitated a reorganization of the permit to allow for these additions. The permit also incorporates the requirements for use of the web-based NOI system for many of the authorization activities. Supporting rationale for these and other changes in the Maryland General Permit No. 20-CP are included in the remainder of this factsheet.

1. Reorganization of the Permit

The Department streamlined and simplified language throughout the CP to present requirements in a generally more clear and readable manner, by incorporation of similar changes implemented by EPA in its latest CGP. This included labeling and grouping requirements in a similar structure to that EPA permit. (Table 1). This structure should enhance operators' understanding of and compliance with the permit's requirements. For example, the Department moved definitions into an appendix and replaced many references to COMAR with the actual language in the regulation so that the operator wouldn't need to look each reference up. Although the permit has been streamlined from prior permits, many of the requirements remain unchanged. The structure of the document consolidated controls in one section, corrective actions in a separate section, monitoring or inspection in another section, so that an operator may more quickly find the relevant item of interest. This also allowed for the addition of the actual SWPPP requirements, sensitive water requirements and use of chemical additives and for more clearly grouping the C&D controls in their own section.

Table 1 - New Permit Structure Compared with Existing Permit

14-GP Structure (where section was located)	**20-CP Structure (new structure)**
Part I. COVERAGE UNDER THIS PERMIT	PART I. PERMIT APPLICABILITY
I.A. Permit Applicability to Areas in Maryland	A. Geographic Coverage
I.B. Eligibility	B. Eligibility Conditions
[Found as bullet 4 in Part III.A "Prohibition of Non-Stormwater Discharges"]	C. Eligible Discharges (Types of Discharges Authorized)
III.A. Prohibition on Non-Stormwater Discharges	D. Prohibited Discharges
I.C. Requiring an Individual Permit or an Alternative General Permit	E. Requiring an Individual Permit or an Alternative General Permit
[Found in Standard Permit Conditions]	F. Continuation of an Expired General Permit
Part II. NOTICE OF INTENT REQUIREMENTS I.D. Authorization	Part II. AUTHORIZATION UNDER THIS PERMIT

II.C. Notice of Intent II.A. Deadlines for Notification II.D. Failure to Notify II.E. Contents of Notice of Intent II.F. Fees II.G. Where to Submit	A. Authorization Request
II.B. NOI Approval Process and Public Review Period	B. NOI Approval Process and Public Review Period
II.H. Effective Date of Coverage	C. Effective Date of Coverage
I.E. Transfer of Authorization	D. Transfer of Authorization
[Found in Standard Permit Conditions]	E. Continuation of Coverage under This General Permit
II.I. Notice of Termination	F. How to Terminate Coverage
Part III. SPECIAL CONDITIONS	Part III. CONTROL MEASURES AND EFFLUENT

Part IV. EFFLUENT LIMITATIONS, PREVENTION OF THE DISCHARGE OF SIGNIFICANT AMOUNTS OF SEDIMENT, MONITORING, RECORDS, AND REPORTING REQUIREMENTS	LIMITATIONS
A. Effluent Limitations	A. Technology-Based Limits
Part V. CONSISTENCY WITH TOTAL MAXIMUM DAILY LOADS	B. Water Quality-Based Limits
C. Monitoring and Records D. Reporting Requirements C. Releases in Excess of Reportable Quantities	C. Site Inspection, Monitoring and Records
B. Prevention of the Discharge of Significant Amounts of Sediment	D. Corrective Actions
D. Training of Personnel E. Compliance with Other Laws	E. Staff Training Requirements
III.B. Other Requirements for Erosion and Sediment Control and Stormwater Management Plans	F. Stormwater Pollution Prevention Plan (SWPPP)
Part VI. STANDARD PERMIT CONDITIONS Part VII. REOPENER CLAUSE	Part VI. STANDARD PERMIT CONDITIONS
Part VIII. AUTHORITY TO ISSUE DISCHARGE PERMITS	Part V. AUTHORITY TO ISSUE GENERAL NPDES PERMITS
Part IX. DEFINITIONS	Appendix A
	Appendix B – C&D Rule Requirement for Buffers
	Appendix C – Tier II Antidegredation Checklist

2. Types of Discharges Authorized

The permit clarifies that stormwater discharges from earth-disturbing activities associated with the construction of staging areas and the construction of access roads conducted prior to active mining are eligible for coverage under the 20-CP.

The 20-CP, like the 14-GP, authorizes several non-stormwater discharges in Part I.E. New to the 20-CP are clarifications on the explicit prohibition of non-stormwater discharges, such as external building washdown waters containing hazardous substances, such as paint or caulk containing polychlorinated biphenyls (PCBs). Also new to the permit is inclusion of chemical additives. Consistent with the 14-GP, authorized non-stormwater discharges are required to comply with any applicable effluent limitation requirements in Parts III.A and Part III.3 of the 20-CP.

3. Effluent Limitations

Changes to the organization of this section are substantial, however the content is very similar, and the supporting rationale is discussed later in this Fact Sheet in Part I.C.16 "Control Measures and Effluent Limitations." The limits are broken up into Technology-Based Limits and Water Quality-Based Limits. The technology-based limits are specific practices or controls that are to be implemented. Many of these address sediment and erosion, and support the E&SC plan. The 14-GP had relied on references to requirements in COMAR. The limits are now drawn from COMAR and are consistent with the EPA CGP. In addition, there are controls for fueling areas, and for other areas that may contain contaminated soils, that would necessitate additional actions and planning, which will trigger the creation of a SWPPP. A comparison of the 14-GP and the EPA CGP resulted in the identification of the full suite of practices required for those pollutants. Where the 14-GP had already included the control, the MDE language was utilized. In cases where the EPA CGP identified a practice, for example for fueling areas, the EPA developed practice was used. This reorganization also provided a better context for additions such as the use of chemical additives, since they logically fall into technology-based limits and have SWPPP components. With the previous permit structure, such additions would have been difficult. The comparison also highlighted the need to include specific requirements for dewatering, beyond the reference to the design manual.

In the Water Quality-Based Limits section are the additions of controls for Sensitive Waters, also called Tier II waters. These are new to the Maryland permit 20-CP. The requirements are discussed later in this fact sheet. Also in this section are requirements for construction in watersheds with PCB impairments. Specifically, the permit requires the implementation of controls on sites discharging to polychlorinated biphenyl-(PCB) impaired waters to minimize the exposure of building materials containing PCBs to precipitation and stormwater. This provision applies to the demolition of structures with at least 10,000 square feet of floor space built or renovated before January 1, 1980. The Department also requires information about the demolition location and associated pollutants to be documented in the SWPPP.

4. Notice of Permit Coverage

As in the 14-GP, construction operators must post a sign or other notice of permit coverage at a safe, publicly accessible location in close proximity to the construction site (Part III.C.8). New to the 20-CP is the requirement to have a copy of the SWPPP on-site, if required to create one in accordance with Part III.F.

5. Notice of Intent (NOI)

The Department added questions to the NOI requirements to be consistent with the eNOI system

and other NPDES permits issued by the State. These questions are:

- The type of construction site (select one or more of 9 options), rather than an SIC code.

- Addition of Tier II watershed identification and ability to upload the Anti-degradation Checklist.

- A yes/no question asking if there is demolition of a structure with at least 10,000 square feet of floor space that was built or renovated before January 1, 1980.

6. Categories of Facilities That Can Be Covered Under This Permit

This permit covers stormwater discharges associated with construction activities located in one of the areas identified in Part I.B, which disturb one or more acres of land, or will disturb less than one acre but are part of a common plan of development or sale that will ultimately disturb one acre or more. See 40 CFR 122.26(b)(14)(x) and (15), in addition to this Part I.B of the permit. Any construction operator that meets the eligibility requirements laid out for coverage is eligible. Eligibility for coverage by the permit is available to operators of "new sites", operators of "existing sites", "new operators of permitted sites", and operators of "emergency related projects". New Operator by way of example is an operator that through transfer of ownership and/or operation replaces the operator of an already permitted construction site that is either a "New site" or an "existing site".

7. Triggers for SWPPP Requirements

The permit requires SWPPPs in certain cases, which are meant to complement the required E&SC or SWM plans. Those changes are discussed in the Permit Requirements section of this fact sheet. The basic premise is that SWPPPs are required when there are pollutants beyond those addressed by the E&SC Plan. The triggers are included in Part III.F.1.c of the permit. The triggers are 1) use of chemical additives or polymers, 2) contaminated soil or demolition, 3) activities such as fueling or batch plants with pollution prevention requirements spelt out in Part III.A.3, and 4) sites which are part of a larger common plan of development.

8. Sensitive Water (Tier II Waters) and Impairment Triggers for E&SC Requirements

These are discussed further in the document below. The summary is that the Department will require a checklist (Appendix C) to be completed for construction within watersheds identified as Tier II, to allow the Department to review the permittee's antidegradation review. If the waterbody is impaired for a pollutant other than sediments, that also may be a trigger for additions to the SWPPP or implementation of additional controls as required by the Department. Both are discussed in the Water Quality-Based limits section.

C. Permit Requirements

This section outlines below the purpose of each provision, followed by the permit requirements (in

text box), followed by any additional explanation of each provision.

1. Part I: Permit Applicability

This permit authorizes the discharge of pollutants to Waters of This State in accordance with the effluent limitations and conditions set forth herein associated with construction activity. Part I and Part II: Permit Applicability and How to Obtain Authorization Under the 20-CP. Part I of the 20-CP details the provisions that must be met to obtain coverage under the permit, and then Part II details how to obtain the authorization. Although these sections have been reorganized from prior permits, most of the requirements for coverage and the process to be followed for seeking coverage remain largely unchanged. The exceptions to the previous process are highlighted below.

2. Part I.A: Geographic Coverage

The requirements in Part I.A describe which operators may be authorized for the permit based on their geography. The key here is that the operator must be registered to do business in Maryland and discharge to State Waters, which is addressed under information required for the NOI.

3. Part I.B: Eligibility Conditions

The requirements in Part I.B describe all the conditions that must be met to be eligible for coverage under the 20-CP. Listing these eligibility conditions ensures that operators have verified that their particular construction project, and discharges from it, are eligible for coverage under this permit.

Part I.B (I.B.1 - I.B.4) Permit Requirements

I.B.1. You are an operator of the construction project for which discharges will be covered under this permit. For the purposes of this permit and in the context of stormwater discharges associated with construction activity, an "operator" is any party associated with a construction project that meets either of the following two criteria:

a. The party has operational control over construction plans and specifications, including the ability to make modifications to those plans and specifications; or

b. The party has day-to-day operational control of those activities at a project that are necessary to ensure compliance with the permit conditions.

Where there are multiple operators associated with the same project, all operators must obtain permit coverage. Subcontractors generally are not considered operators for the purposes of this permit.

I.B.2. The project will disturb one or more acres, or will disturb less than one acre but is part of a common plan of development or sale that will ultimately disturb one or more acres, or the project's discharges have been designated by the Department as needing a permit under § 122.26(a)(1)(v) or § 122.26(b)(15)(ii).

I.B.3. For operators of a "new source" (as defined in Appendix A)

a. The Department has not, prior to authorization under this permit, determined that discharges from your site will cause, have the reasonable potential to cause, or contribute to an excursion above any applicable water quality standard. Where such a determination is made prior to authorization, the Department may notify the operator that an individual permit application is necessary in accordance with Part I.C.2. However, the Department may authorize coverage under this permit after the operator has included appropriate controls and implementation procedures designed to bring the discharge into compliance with this permit, specifically the requirement to meet water quality standards. In the absence of information demonstrating otherwise, the Department expects that compliance with the stormwater control requirements of this permit, including the requirements applicable to such discharges in Part III.B, will result in discharges that will not cause, have the reasonable potential to cause, or contribute to an excursion above any applicable water quality standard; and

Discharges from your site to a Tier II water will not lower the water quality of the applicable receiving water. In the absence of information demonstrating otherwise, the Department expects that compliance with requirements of this permit, including the requirements applicable to such discharges in Part III.B.2, will result in discharges that will not lower the water quality of such waters.

I.B.4. Discharges from the project are not:

Already covered by a different NPDES stormwater permit for the same discharge.
Note that this does not include the following: (1) sites currently covered under the 14-GP that will be seeking coverage under this permit, nor (2) sites that will be covered under this permit that are transferring coverage to a different operator.

[Note that notwithstanding a project being ineligible for coverage under this permit because it falls under the description of (a) or (b) above, the Department may waive the applicable eligibility restriction after specific review if it determines that coverage under this permit is indeed appropriate.]

The definition of “operator” in Part I.B. above is consistent with the 14-GP. Any party associated with a construction site that meets the first part of the definition of “operator” (i.e., the party has operational control over construction plans and specifications, including the ability to make modifications to those plans and specifications) or the second part of the definition of “operator” (i.e., the party has day-to-day operational control of those activities at a project that are necessary to ensure compliance with the permit conditions) must obtain NPDES permit coverage for its stormwater discharges associated with construction activity including clearing, grading, and excavation.

Part I.B of the permit now clarifies the requirements with respect to projects with multiple operators. Where there are multiple operators associated with the same project, all operators must obtain permit coverage. The 14-GP however was not crystal clear in this respect, which resulted in multiple transfers of authorization in common plans of development. The result was often confusion by both inspector and permittee with regards to who had responsibility in those types of projects. This clarification in Part B.1.b and the resulting requirements for a SWPPP to clarify who has control, will

aid inspectors and those who are authorized in determining areas of responsibility.

Also, if the operator of a "construction support activity" (see Part I.B.1.b) is different than the operator of the main site, that operator must also obtain permit coverage. For example, if a construction support activity for the project is owned by a separate owner, and if the separate owner meets the definition of "operator", that person must obtain permit coverage for discharges from the site where the support activities are located. For concrete batch plants, coverage under MD state permit 15-MM, the General Permit for Discharges from Mineral Mines, Quarries, Borrow Pits, and Concrete and Asphalt Plants, may also be required if the plant discharges process water. However, if the construction support activity is owned or operated by the site operator, then the support activity must be included in the site operator's permit coverage, including any documentation provided in the NOI and SWPPP. Part I.B references Part III.F for clarification on the sharing of permit-related functions between and among operators on the same site and for conditions that apply to developing a SWPPP for multiple operators associated with the same site.

The requirements in Part I.B.3, which apply to new sources, are designed to comply with 40 CFR 122.4(i) requirements that address the issuance of permits to new sources to bodies of water not meeting instream water quality standards. The Department notes that while Part I.B.3 is designed to specifically implement 40 CFR 122.4(i), other water quality-based requirements apply to existing sources, as well as new sources. Part III.B of the permit includes water quality-based effluent limits applicable to all sources, which are designed to ensure that all discharges from all operators are controlled as necessary to meet water quality standards.

Part I.B.3.b also requires operators to determine if they discharge to a Tier II water, and if they do, to comply with specific requirements in the permit, which are intended to ensure that their discharges will not result in a lowering of water quality in the receiving water. This provision makes clear to operators their requirements for complying with antidegradation requirements, and provides assurance that operators will not cause or contribute to a lowering of water quality in the receiving water.

4. Part I.C: Types of Discharges Authorized

Part I.C of the 20-CP provides operators with a comprehensive list of the types of discharges that are authorized once covered under this permit. This is modified from the 14-GP and is now consistent with other permits issued by the Department and with EPA's CGP. The result of providing the full list should be improved knowledge by the permittee and inspector as to what is covered by the permit. This list provides clarifications from the 14-GP, and makes operators aware of allowed stormwater and non- stormwater discharges, and of any additional requirements associated with those discharges to minimize the discharge of pollutants, and also makes operators aware that any discharges not included on the list are not authorized under this permit.

Part I.C.1 lists categories of stormwater discharges that are allowed under the 20-CP, provided that all applicable permit limits and conditions are met.

Part I.C.1 Permit Requirements

The following stormwater discharges are authorized under this permit provided that

appropriate stormwater controls are designed, installed, and maintained (see Parts III.A and III.B):

a. Stormwater discharges, including stormwater runoff, snowmelt runoff, and surface runoff and drainage, associated with construction activity under 40 CFR 122.26(b)(14) or 122.26(b)(15)(i);

b. Stormwater discharges designated by the Department as needing a permit under 40 CFR § 122.26(a)(1)(v) or § 122.26(b)(15)(ii);

c. Stormwater discharges (no process water) from construction support activities (e.g., concrete or asphalt batch plants, equipment staging yards, material storage areas, excavated material disposal areas, borrow areas) provided that:

i. The support activity is directly related to the construction site required to have permit coverage for stormwater discharges;

ii. The support activity is not a commercial operation, nor does it serve multiple unrelated construction projects;

iii. The support activity does not continue to operate beyond the completion of the construction activity at the project it supports; and

iv. Stormwater controls are implemented in accordance with Part III.A and Part III.B for discharges from the support activity areas.

d. The permit also clarifies that stormwater discharges from earth-disturbing activities associated with the construction of staging areas and the construction of access roads conducted prior to active mining are eligible for coverage under the CGP.

Part I.C.1.d includes that new clarification that stormwater discharges from earth-disturbing activities associated with the construction of staging areas and the construction of access roads conducted prior to active mining are eligible for coverage under the 20-CP. This clarification was added to ensure consistency between this permit, the 12SW, the 15MM, EPA's MSGP and EPA's CGP, which gives mining operators the option of having these same stormwater discharges covered under that permit or having them covered under the CGP. This language simply makes it clear to mining operators that these stormwater discharges are in fact eligible under the 20-CP, as intended.

Part I.C.2 provides authorization for non-stormwater discharges from the operator's construction activity.

Part I.C.2 Permit Requirements

The following non-stormwater discharges associated with your construction activity are authorized under this permit provided that, with the exception of water used to control dust and to irrigate vegetation in stabilized areas, these discharges are not routed to areas of exposed soil on your site and you comply with any applicable requirements for these discharges in Parts I.ii.A and III.B:

a. Discharges from emergency fire-fighting activities;

b. Landscape irrigation;

c. Water used to wash vehicles and equipment, provided there is no discharge of soaps, solvents, or detergents used for such purposes;

d. Water used to control dust;

e. External building washdown, provided soaps, solvents, and detergents are not used, and external surfaces do not contain hazardous substances (as defined in Appendix A) (e.g., paint or caulk containing polychlorinated biphenyls (PCBs));

f. Pavement wash waters, provided spills or leaks of toxic or hazardous material have not occurred (unless all spill material has been removed) and where soaps, solvents, and detergents are not used. The operator is prohibited from directing pavement wash waters directly into any water of the U.S., storm drain inlet, or stormwater conveyance, unless the conveyance is connected to a sediment basin, sediment trap, or similarly effective control;

g. Uncontaminated air conditioning or compressor condensate;

h. Uncontaminated, non-turbid discharges of ground water or spring water;

i. Foundation or footing drains where flows are not contaminated with process materials such as solvents or contaminated ground water; and

j. Construction dewatering water discharged in accordance with Part III.A.4, and which must be managed by controls in accordance with the 2011 Standards and Specifications for Soil Erosion and Sediment Control or any updated standards issued by MDE (after their effective date).

Part I.C.2.e adds a new condition that discharges of external building washdown waters containing hazardous substances (e.g., paint or caulk containing PCBs) are not authorized. The purpose of this new provision is to prevent releases of PCBs in the environment when these wash waters contact external building surfaces containing PCBs. If the operator were to discharge washdown waters containing PCBs to an MS4 or directly to a receiving water, these would be unauthorized discharges.

The Department notes that “uncontaminated” means that the discharge does not cause or contribute to an exceedance of applicable water quality standards. Similarly, “non-turbid” means the discharge does not cause or contribute to an exceedance of turbidity-related water quality standards. See Appendix A.

I.C.3 If the operator plans to add cationic treatment chemicals (as defined in Appendix A) to stormwater and/or authorized non-stormwater prior to discharge, it is ineligible for coverage under this permit and may not be authorized for coverage under this permit until the operator obtains approval from the Department that it has included appropriate controls and implementation procedures designed to ensure that their use of cationic treatment chemicals will not lead to discharges that cause an exceedance of water quality standards. In the absence of such authorization, to use cationic treatment chemicals at the site, the operator must apply for and receive coverage

under an individual permit. (The procedures for both cationic and anionic chemical additives are new to this renewal and include selecting from pre-approved listings which meet criteria that protect State Waters).

EPA had implemented similar procedures which were incorporated by reference into their latest renewal of the CGP. The incorporated reference included the discussion in the 2012 CGP fact sheet
concerning background on cationic treatment chemicals as well as the agency's rationale for adopting this provision. See section VI.2.4 "Use of Cationic Treatment Chemicals" on pages 20 through 28 of the 2012 CGP fact sheet, available at
https://www.epa.gov/sites/production/files/2015- 10/documents/cgp2012_finalfactsheet.pdf

Part I.C.4 provides authorization to discharge authorized stormwater or authorized non-stormwater discharges, commingled with a discharge authorized by a different NPDES permit and/or a discharge that does not require NPDES permit authorization.

Part I.C.4 Permit Requirements

Also authorized under this permit are discharges of stormwater listed above in Part I.C.1, or authorized non-stormwater discharges listed above in Part I.C.2, commingled with a discharge authorized by a different NPDES permit and/or a discharge that does not require NPDES permit authorization.

5. Part I.D: Prohibited Discharges

Part I.D identifies the types of discharges that are prohibited from occurring at the operator's construction site. This list prohibits the following discharges:

Part I.D (I.D.1 - I.D.6) Permit Requirements

I.D.1. Wastewater from washout of concrete, unless managed by an appropriate control as described in the 2011 Standards and Specifications for Soil Erosion and Sediment Control, Section H-6;

I.D.2. Wastewater from washout and cleanout of stucco, paint, form release oils, curing compounds and other construction materials;

I.D.3. Fuels, oils, or other pollutants used in vehicle and equipment operation and maintenance

I.D.4. Soaps, solvents, or detergents used in vehicle and equipment washing or external building washdown;

I.D.5. Toxic or hazardous substances from a spill or other release; and

I.D.6. Water contaminated by toxic or hazardous substances from sites managed under Maryland's Voluntary Cleanup Program (VCP) or Land Restoration Program (LRP), not addressed by a stormwater pollution prevention plan (Part III.F) and consistent with requirements stipulated by MDE LMA. This is new to the permit language, which puts into the permit the clarification how those facilities may be covered by the permit.

Part I.D also specifies that to prevent the above-listed prohibited non-stormwater discharges, operators must comply with the applicable pollution prevention requirements in Part III.A.3.

Part 1.D details the types of wastes and other pollutants that operators are prohibited from discharging under the permit. The requirements in Parts I.D.1 through I.D.4 above implement prohibitions included in the C&D rule at 40 CFR 450.21(e). The requirement in Part I.D.5 and I.D.6 above to prohibit toxic or hazardous substances from a spill or other release corresponds to Part III.C.2 of the 14-GP ("you are not authorized to discharge hazardous substances or oil resulting from an on-site spill"). The Department includes the types of prohibited non-stormwater discharges in the permit as a reminder to the operator that the only authorized non-stormwater discharges are at Part I.C.2. Any unauthorized non-stormwater discharges must be covered under an individual permit or alternative general permit.

This provision, which is now Part I.D in this permit, was consolidated from various Parts in the 14-GP. Moving this section on prohibited discharges to immediately follow Part I.C on authorized discharges specifies for operators in one place in the permit which discharges are and are not allowed under the 20-CP.

6. Part I.E Requiring an Individual Permit or an Alternative General Permit

The Department includes the prohibited non-stormwater discharges in Part D above as a reminder to the operator that the only non-stormwater discharges authorized by this permit are in Part C above. Any unauthorized non-stormwater discharges must be covered under an individual permit or alternative general permit. This part of the permit was in the 14-GP, however the number of scenarios when an individual permit may be required are now listed many of the commonly required alternative permits for construction sites.

7. Part I.F Continuation of an Expired General Permit and Permit Coverage

This section was contained within the standard conditions of the 14-GP, but was moved to this portion of the permit as it was a common point of confusion for those who had coverage and MDE received comments from EPA during their review of the draft documents. The permit now states, in accordance with 40 CFR 122.6 and 40 CFR 122.46(a) that new NOIs are not allowable after the permit expires, and requires permittees to submit a request for continuance 60 days prior to the expiration date of 20-CP. The new language states: "Unless this permit is terminated by the Department, an expired general permit continues in full force and effect for those with permit coverage on the date of expiration until the date specified under a reissued general permit or an individual permit is issued, whichever comes first. If you wish to continue an activity regulated by this permit after the expiration date of this permit, you shall submit a Continuation of Registration statement at least 60 days before the expiration date of the existing permit, unless permission for a later date has been granted by the Department. Notices of Intent or Continuation of Registration statements submitted later than the expiration date of the existing permit will not be accepted by the Department." The Continuation of Registration statement will include a certification from the permittee that all required plans remain current, contact information has been updated if necessary, and a recommitment to continue to abide by the terms and conditions of the permit during the administratively extended period of the permit.

8. Part I.G Duty to Reapply.

This section was added based on EPA's review, as it is a standard condition found in 40 CFR 122.41(b) that was omitted from the 14-GP. . "If you wish to continue an activity regulated by this permit under a renewed general permit, you must apply for and obtain authorization as required by the new permit once the Department issues it." This also clarifies that submitting a Continuation of Registration statement does not provide permit coverage under the new permit; a new NOI must be submitted.

9. Part II: Authorization under this Permit

This portion of the permit was restructured similar to the EPA CGP, to highlight the fact that submittal of an NOI is required in order for discharges associated with construction activity to be authorized under this General Permit. Part II carries out the fundamental requirement that discharges are not authorized until permit coverage is obtained, and that permit coverage is obtained for the 20-CP through the submission of a complete and accurate NOI followed by a minimum 14-day waiting period.

Part II Permit Requirements: Part II specifies that all "operators" (as defined in Appendix A) associated with the construction site, who meet the Part I.B eligibility requirements, and who seek coverage under the final permit, must submit to the Department a complete and accurate NOI prior to commencing construction activities.

Part II provides an exception for operators that are conducting construction activities in response to a public emergency (e.g., natural disaster, widespread disruption in essential public services), and the related work requires immediate authorization to avoid imminent endangerment to human health, public safety, or the environment, or to reestablish essential public services. If any of these circumstances apply, the operator may discharge on the condition that a complete and accurate NOI is submitted within 30 calendar days after commencing construction activities (see Table 1 in the permit) establishing that you are eligible for coverage under this permit. The operator must also provide documentation in the SWPPP to substantiate the occurrence of the public emergency.

The Department recognizes that obtaining 20-CP coverage following the normal procedures is not feasible in situations requiring emergency-related construction. The Department includes the exception in Part II, consistent with EPA's CGP approach, to ensure that the authorization process does not interfere with emergency-related construction projects required to avoid endangerment to human health, public safety, or the environment. By providing the operators of these projects with the ability to immediately begin work, and to postpone the NOI submission and SWPPP completion deadlines for 30 calendar days, the Department intends that these projects may proceed without delay. Once the initial 30 calendar days has expired, however, an NOI must be submitted and a SWPPP must be completed. In these cases, and approved Erosion and Sediment Control plan may not be required, therefore the SWPPP becomes even more important for understanding the measures planned for by the operator.

Part II: Prerequisite for Submitting Your NOI. Part II clarifies requirements for submitting the NOI. Those elements follow. Language related to submission of NOIs after the permit expiration date was also added, specifying that NOIs may not be submitted after the General Permit expires.

10. Part II.A Authorization Request Requirements

Part II.A.1 clarifies the elements of the NOI submission. Part II.A.2 specifies the required elements on the NOI.

Part II.A.3 clarifies the fees required to complete the submission of the NOI. A clarification was included in this section regarding certain activities within a Common Plan of Development. The fee exception is clarified: "For larger common plans of development where grading and utility work has been completed under an NOI, and individual builders are constructing single family homes on an individual lot or parcel, or groups of these by a single builder within a common plan of development, there is no additional fee." This change is meant to eliminate confusion when these portions of the development have been using transfers under the 14-GP for this situation, where the Department prefers an NOI for the activity. It is noted that neighboring Virginia provides coverage for single family homes in this situation without NOI.

Part II.A.4 is new and addresses new documentation required in certain cases for coverage under this permit. It clarifies a SWPPP consistent with Part III.F or an antidegradation checklist, as a prerequisite to submitting an NOI for coverage under this permit, in addition to the E&SC and SWM. We have also clarified here that in cases where the signed E&SC or SWM cannot be easily uploaded, that a letter from the approval authority will also be accepted.

Parts II.A.5 and II.A.6 specify that operators must use the Department's eNOI tool to electronically prepare and submit their NOIs for coverage under the 20-CP, unless the operator receives a waiver from the Department. Waivers from electronic reporting may be granted based on one of the following conditions:

a. If the operator's operational headquarters are physically located in a geographic area (i.e., ZIP code or census tract) that is identified as underserved for broadband Internet access in the most recent report from the Federal Communications Commission; or

b. If the operator has limitations regarding available computer access or computer capability. If the operator wishes to obtain a waiver from submitting a report electronically, operators must submit a request to the Department. In that request, operators must document which exemption they meet, provide evidence supporting any claims, and a copy of their completed NOI form. A waiver may only be considered granted once operators receive written confirmation from the Department. If the Department grants the operator approval to use a paper NOI, and they elect to use it, the operator must request the form from the Department.

Part II.A.7 and II.A.8 specify that the person signing the documents must meet certain requirements. For a corporation: by a responsible corporate officer; For a partnership or sole proprietorship: by a general partner or the proprietor, respectively; For a municipality, State, federal, or other public agency: by either a principal executive officer or a duly authorized official.

Part II.A.9: Deadlines for Submitting Your NOI and Your Official Date of Permit Coverage
The deadlines set are consistent with MDE's other General Permit requirements, allowing for complete

review and issuance under the permit. The format in the table was adopted from EPA's CGP, as a clearer way to specify requirements and deadlines for each situation.

Part II.A.9 specifies the deadlines for submitting NOIs for permit coverage and special instructions for permit coverage in Table 1. NOI submittal deadlines vary depending on when the operator commences construction activity. Table1 summarizes the deadlines and permit coverage start dates based upon the type of construction project as follows:

Table 1 - ***Deadlines for Permit Coverage***

Type of Operator	**NOI Submittal Deadline**	**Special Instructions**
Operator of an Existing Construction Site (i.e. a site with 14GP coverage where construction activities commenced prior to the effective date of this permit).	Within 6 months after the effective date of this permit. Authorization to discharge under 14GP continues in the interim.	On eNOI select 'Continuation'. No additional fee, documentation or comment period is required.
Operator of a New Site (i.e. a site where construction activities commence on or after the effective date of this permit).	A minimum of 60 days prior to commencing construction activities.	
New Operator (i.e. an operator that through transfer of ownership and/or operation replaces the operator of an already permitted construction site that is either a "New site" or an "existing site").	A minimum of 30 days prior to date that the transfer will take place to the new owner/operator.	No additional fee or comment period is required.
Change in Construction Activity (i.e. a request to modify an existing registration for use of a chemical additive or other triggering activity requiring SWPPP).	A week prior to initiating the change.	In these cases were the SWPPP is required, include an updated SWPPP with the submission.
Increase in Construction Activity (i.e. a request to modify an existing registration for an increase in project acreage).	A minimum of 60 days prior to commencing construction activities.	If the increase is one acre or more, the process is the same as a new NOI. Fees are only assessed if the modification results in the total acreage being increased to the next fee tier.

Operator of an "emergency-related project" (i.e., a project initiated in response to a public emergency (e.g., mud slides, earthquake, extreme flooding conditions, disruption in essential public services), for which the related work requires immediate authorization to avoid imminent endangerment to human health or the environment, or to reestablish essential public services).	No later than 7 calendar days after commencing construction activities.	The operator is considered provisionally covered under the terms and conditions of the permit immediately. After reviewing the NOI, the Department may request more information prior to issuing full coverage or deny continued coverage.

The term "operator of a new site" in Table 1 is used to describe projects that commence earth disturbing activities on or after the effective date of the permit. New sites include those new sources that are subject to the C&D rule's New Source Performance Standards (NSPS) because they commenced construction after February 1, 2010 (the effective date of the C&D rule). The term "new site" was adopted to avoid the confusion that would have resulted if the permit used the term "new source".

The term "operator of an existing construction site" in Table 1 refers to construction projects that commenced activities prior to the effective date of the permit. Existing sites include both those activities that began prior to the February 1, 2010 effective date of the NSPS of the C&D rule, and may have been covered under the 14-GP, and those activities that are subject to the NSPS because they commenced after February 1, 2010, but before the effective date of this permit.

Part II.A.10 Failure to Notify. Carried over from 14-GP Part II.D. If you miss the deadline to submit your NOI, any and all discharges from your construction activities will continue to be unauthorized under the CWA until they are covered by this or a different NPDES permit. The Department may take enforcement action for any unpermitted discharges that occur between the commencement of construction activities and discharge authorization. Discharges are not authorized if your NOI is incomplete or inaccurate or if you are not eligible for permit coverage.

Part II.A.11 Modifying your NOI. The 14-GP required NOI modifications (Part II.A.4) for increases in acres disturbed, however the 20-CP has additional reasons such as use of chemical additives or activities requiring a SWPPP, which have been included in this condition.

11. Part II.B NOI Approval Process and Public Review Period

This process is carried over from the 14-GP. During this waiting period, the public has an opportunity to review the NOIs and review the E&SC Plans. Anyone wishing to provide feedback to the Department can send information for consideration. Where appropriate, the Department will address concerns raised (e.g., will direct the relevant operator to make improvements to the designed stormwater controls as necessary to meet the requirements of the permit). Depending on the nature of the issue and the timing of the comments, the Department will take appropriate action either prior

to or following discharge authorization. In addition, the Department may delay authorization if warranted, or may determine that the discharge is not eligible for authorization under this permit.

An exception to this process was added for certain common plan of development sites. For larger common plans of development where grading and utility work has been completed under an NOI, and individual builders are constructing single family homes on an individual lot or parcel, or small groups of homes are being constructed by a single builder within a common plan of development, there is no requirement for an additional notification period. The E&SC plan has already been approved, and the details for single family homes included in the detail. This change is meant to eliminate confusion that existed under the 14-GP, where these have been handled by transferring individual lots, essentially creating cases where 70 or more co-permittees exist at a single site. The Department prefers an NOI for the construction activity, so that an inspector will have records of the original common plan, as well as the documentation on individual lots. It is noted that neighboring Virginia provides coverage for single family homes in this situation with no NOI. Maryland prefers to have recorded those with activities in the development. However, for townhouses, institutional, commercial, or industrial development, the NOI and notification period still applies.

The section changed slightly, moving the requirements in the 14-GP Part II.B.4 into the 20-CP Part II.A.4.

Table 1 describes that operators of emergency-related projects are considered provisionally covered under the permit immediately upon the start of construction. Once the Department receives their NOI it will be processed for registration unless the Department notifies the operator that their authorization has been delayed or denied.

If the operator requests a waiver and submits a paper NOI, the period prior to permit coverage is the same as above, however this period commences only after the Department completes manual entry of the paper NOI information into eNOI. Note that if the paper NOI contains errors or is incomplete, this will result in delaying the commencement of the 14-day waiting period. The operator would be able to tell when the 14-day waiting period has begun by checking for their eNOI.

12. Part II.C Effective Date of Coverage.

This part is similar to Part II.F of the 14-GP, but now clarifies the registration information provided at the time of issuance. Once covered under the 20-CP, the permit requires a continuance to be filed at least 60 days prior to expiration to maintain permit coverage. Once a continuance is submitted, permit coverage will last until the earliest of the following: the operator submits an NOI and receives permit coverage under a reissued or replacement version of this permit, the Department issues an individual permit, the operator terminates permit coverage, or the Department terminates coverage.

13. Part II.D Transfer of Authorization.

This section was moved, and updated. Although EPA's CGP requires that a new owner file a new NOI, and the old owner file a NOT, Maryland process as laid out in the section allows for a joint filing, essentially processing both actions at once. The 14-GP did confuse operators by using the wording of Persons must transfer, where the operators then believed whenever a manager changed or they reorganize their organization, that they needed to transfer the permit. The permit transfer is meant

only for changes in actual ownership, as the registration is for the corporation or entity as defined in the permit signatory requirements. The Department believes the updated language will help clarify this common point of confusion. Also, transfers have been performed from a common plan of development to the individual operators within that developed area. This also is a point of confusion intended to be clarified in the language. In those cases, the sub-developer must file an NOI for the parcels they are responsible for developing, not a transfer of the larger NOI.

14. Part II.E E&SC Requirements for Coverage

Once construction has commenced, it is a condition of this permit that erosion and sediment control and stormwater management plan approvals be kept up to date. Construction activity may not continue if these plans have expired, but may resume once plans are renewed without payment of an additional fee as long as coverage under this General Permit is still in effect.

15. Part II.F How to Terminate Coverage.

This section was moved from Part II.I in the 14-GP and renamed from "Notice of Termination" to "How to Terminate Coverage", and the following conditions for terminating coverage were added, consistent with MDE guidance given to permittees and as provided by the EPA CGP.

Conditions for Terminating Coverage

You must terminate permit coverage only if one or more of the following conditions has occurred:

a. You have completed all construction activities at your site and, if applicable, construction support activities covered by this permit (see Part I.C.1.c), and you have met the following requirements:
   i. For any areas that (1) were disturbed during construction, (2) are not covered over by permanent structures, and (3) over which you had control during the construction activities, you have met the permanent stabilization requirements for final vegetative or non-vegetative stabilization in Part III.A.2.f;
   ii. You have removed and properly disposed of all construction materials, waste and waste handling devices, and have removed all equipment and vehicles that were used during construction, unless intended for long-term use following your termination of permit coverage;
   iii. You have removed all stormwater controls that were installed and maintained during construction, except those that are intended for long-term use following your termination of permit coverage or those that are biodegradable; and
   iv. You have removed all potential pollutants and pollutant-generating activities associated with construction, unless needed for long-term use following your termination of permit coverage; or
b. You have transferred control of all areas of the site for which you are responsible under this permit to another operator, and that operator has submitted an NOI and obtained coverage under this permit; or
c. Coverage under an individual or alternative general NPDES permit has been obtained. To terminate coverage under these conditions, you must submit a Notice of Termination form, which may be obtained through the electronic system designated by the

Administration, on MDE's website, or upon request to MDE.

16. Part III: Control Measures and Effluent Limitations

This section name changed slightly, in part to be consistent with Maryland's other General Permits and the EPA General Permits, but also the previous name, although much longer, didn't get to the heart of what is in the section. The items contained in this section are the heart of what each operator must do at their construction site in order to protect Maryland Waters. As noted below many are federally mandated as Effluent Limitations Guidelines. Many are required based on State Law.

The obvious key difference between this section and the 14-GP are the inclusion of many of the requirements in COMAR that are considered when Erosion and Sediment Control Plans are created. Whereas the 14-GP assumed the protections were sufficient, they are now limits included in the permit so that both the operator and inspector understand the significance of not including specific controls. Including those practices as permit limits does increase focus on them. We have also included the pollution prevention practices that will be important when SWPPPs are generated. The newly included controls and practices make it clear as to what the expectations are for operators. The other clarification is the distinction between Technology-Based (Part III.A) and Water Quality Based (Part III.B) limits. With this addition MDE is able to provide requirements for Sensitive Waters (Tier II), address local impairments, and include a provision for sites with discharges to bodies of water with TMDL wasteload allocations (Part V of the 14-GP).

17. Part III.A: Technology-Based Limits

Part III.A organizes the stormwater effluent limitations into four sections:

• Part III.A.1: Control Measure Selection and Design Considerations;

• Part III.A.2: Erosion and Sediment Control Requirements;

• Part III.A.3: Pollution Prevention Requirements; and

• Part III.A.4: Construction Dewatering Requirements.

The stormwater control requirements in Part III.A are the technology-based effluent limitations that apply to all discharges associated with construction activity eligible for permit coverage. The requirements in Part III.A generally apply the national effluent limitations guidelines and new source performance standards in the Construction and Development Rule ("C&D rule") in 40 CFR Part 450 promulgated on December 1, 2009 (74 Fed. Reg. 62996), and amended on March 6, 2014 (79 Fed. Reg. 12661). These requirements apply to all permitted sites, including construction support activities that are covered under the permit under Part I.C.1.c.

The Department's Incorporation of the Non-Numeric Limits

An operator can minimize the discharge of pollutants from construction sites by satisfying the non-numeric effluent limitations at 40 CFR 450.21 and by using various controls and practices, outlined in more detail by the State's design standards and E&SC / SWM plan approving agencies. The

Department refers to and makes use of the EPA crafted non-numeric effluent limits in the C&D rule to allow flexibility in how the permitting authority implements these requirements in permits. See 74 FR 63016.
As an example, 40 CFR 450.21(a)(5) requires construction operators to design, install, and maintain controls to "minimize sediment discharges from the site." Thus, each NPDES permitting authority has some discretion within this somewhat broad requirement, defined further at 40 CFR 450.21(a)(5), to further define what it means to minimize sediment discharges, or to achieve any of the other non-numeric limits. See 74 FR 63016.

Accordingly, this permit contains requirements that specifically implement or incorporate each of the C&D rule's non-numeric limits in order to minimize the discharge of pollutants from construction sites. This is consistent with EPA's objective to write general permits with conditions that are clear, specific, and measurable. Many states adopt the EPA CGP language outright. When Maryland adopts the same language, it provides consistency for permittees that do work in other states. In the sections that follow, the Department discusses the permit requirements, and explains how the language is consistent with the non-numeric effluent limits in the C&D rule upon which they are based.

a. Part III.A.1: Control Measure Selection and Design Considerations

Part III.A.1 establishes the overall principle for designing, installing, and maintaining stormwater controls that work to minimize the discharge of pollutants from construction sites, as required in 40 CFR 450.21.

Part III.A.1 Permit Requirements

Part III.A.1 includes the general requirement that the operator must design, install, and maintain stormwater controls required in Parts III.A.2 and III.A.3 to minimize the discharge of pollutants in stormwater from construction activities. Part III.A..1 includes design, installation, and maintenance requirements that must be followed for all such controls.

Part III.A.1.a: Design Factors

Part III.A.1.a requires the operator to account for design factors that address the corresponding C&D rule requirements in 40 CFR 450.21(a)(2) and (5).

Part III.A.1.a Permit Requirements

In the design of stormwater controls, operators must account for the following factors:

i. The expected amount, frequency, intensity, and duration of precipitation;

ii. The nature of stormwater runoff and run-on at the site, including factors such as expected flow from impervious surfaces, slopes, and site drainage features. You must design stormwater controls to control stormwater volume, velocity, and peak flow rates to minimize discharges of pollutants in stormwater and to minimize channel and streambank erosion and

scour in the immediate vicinity of discharge points; and

iii. The soil type and range of soil particle sizes expected to be present on the site.

It is important to consider precipitation characteristics so that earth-disturbing activities can be planned during periods with a lower risk of precipitation and so that erosion and sediment control practices can be designed to convey and manage the precipitation that is expected to occur. The requirement to design stormwater controls to account for the nature of stormwater runoff and run-on on the site and to reduce peak flowrates and total stormwater is intended to minimize scouring and erosion caused by stormwater discharges from the site. The requirement to account for soil characteristics, such as particle size distribution, erosivity, and cohesiveness, is also important for selecting and designing appropriate erosion and sediment controls.

Part III.A.1.b: Good Engineering Practices

Part III.A.1.b implements the C&D rule requirement to "install effective erosion and sediment

controls." Part III.A.1.b Permit Requirements

The operator must design and install all stormwater controls in accordance with good engineering practices, including applicable design specifications.

In order for stormwater controls to be effective, they must be properly designed and installed. The Department notes that design specifications may be found in manufacturer specifications and/or in the State's 2011 Handbook or local ordinances. Additionally, where it is appropriate to depart from such specifications, this must reflect good engineering practice and must be explained in the E&SC Plan.

Part III.A.1.c: Complete Installation Prior to Commencement of Construction

Part III.A.1.c is intended to ensure that stormwater controls are installed and made operational to minimize pollutant discharges from the area of active disturbance.

Part III.A.1.c Permit Requirements

The operator must complete the installation of stormwater controls by the time each phase of construction has begun:

i. By the time construction activity in any given portion of the site begins, the operator must install and make operational any downgradient sediment controls (e.g., buffers, perimeter controls, exit point controls, storm drain inlet protection) that control discharges from the initial site clearing, grading, excavating, and other earth-disturbing activities. The Department notes that this requirement does not apply to the earth disturbance associated with the actual installation of these controls. Operators should take all reasonable actions to minimize the discharges of pollutants during the installation of stormwater controls.

ii. Following the installation of the initial controls, the operator must install and

make operational all stormwater controls needed to control discharges prior to subsequent earth-disturbing activities.

For example, prior to initial site clearing and grading activities, the operator must install perimeter controls, exit point controls, and, if applicable, storm drain inlet protections and natural buffers or equivalent sediment controls to control stormwater discharges from the initial disturbances. After this initial work is completed, the operator must install and make operational other controls, such as sediment traps or sediment basins that are expected to treat stormwater during the remaining phases of construction. Where a project is conducted in phases, such as for a large-scale road project, the requirement is to install such controls prior to commencing earth-disturbing activities for the particular phase. After initial controls are installed, the operator must install and make operational any remaining stormwater controls as conditions allow.

III.A.1.d: Maintain Controls in Effective Operating Condition

III.A.1.d implements the C&D rule requirement to "maintain effective erosion controls and sediment
controls" at 40 CFR 450.21(a) and the NPDES requirement at 40 CFR 122.41(e) to "at all times properly operate and maintain all facilities and systems of treatment and control …."

Part III.A.1.d Permit Requirements

During permit coverage, the operator must ensure that all stormwater controls are maintained and remain in effective operating condition and are protected from activities that would reduce their effectiveness.

i. Comply with any specific maintenance requirements for the stormwater controls listed in this permit, as well as any recommended by the manufacturer.

ii. If at any time you find that a stormwater control needs routine maintenance, you must immediately initiate the needed maintenance work, and complete such work by the close of the next business day.

iii. If at any time you find that a stormwater control needs repair or replacement, you must comply with the corrective action requirements in Part III.D.

b. Part III.A.2: Erosion and Sediment Control Requirements

Part III.A.2 implements the C&D rule's requirement at 40 CFR 450.21(a) to "design, install, and maintain effective erosion controls and sediment controls to minimize the discharge of pollutants," as well as the requirements in 40 CFR 450.21(b) for soil stabilization. This is also consistent with the State's requirement to have E&SC and SWM plans approved by the appropriate approval authority.

Part III.A.2 Permit Requirements

Part III.A.2 requires the operator to implement erosion and sediment controls that

minimize the discharge of pollutants in stormwater from construction activities.

The specific sections of the permit within Part III.A.2 include requirements that articulate what is expected of 20-CP operators in order to comply with this effluent limitation established in the C&D rule.

Part III.A.2.a: This Part addresses the requirements for Natural Buffers / Stream Protection Zone.

The term Stream Protection Zone is defined in the permit. The purpose of the Stream Protection Zone is to establish first a preference for preserving natural buffers, and when that is not possible, to identify the required additional controls when development encroaches on a stream. Part III.A.2.a implements the C&D rule's requirement to minimize the discharge of pollutants from the site by providing and maintaining "natural buffers around waters of the United States… unless infeasible." See 40 CFR 450.21(a)(6).

Part III.A.2.a Permit Requirements

i. Provide and maintain buffers to edge of stream of at least 50 feet for Tier I watersheds, or an average of 100 feet for Tier II watersheds, and/or implement additional erosion and sediment controls.

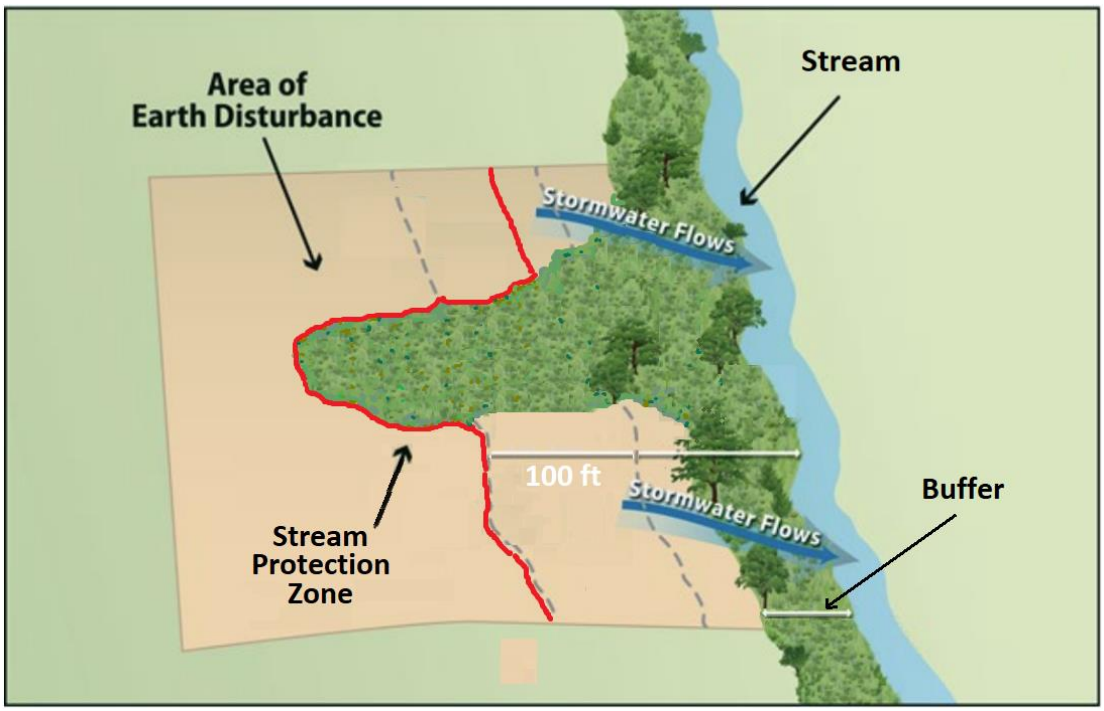


Figure 1 - Example of how the 100 foot buffer averaging occurs.

Appendix B was created using EPA's CGP as a template to facilitate understanding how to determine the Stream Protection Zone limit, and when infeasible, to provide and maintain an undisturbed natural buffer of any size and determine which type(s) of controls need to be considered if work is performed within that Zone.

This requirement for considering additional controls applies to all project sites that are situated within the Stream Protection Zone, with certain exceptions as allowed for in the Appendix B. The exceptions were adopted from EPA's CGP.

Background on the selection of 50 feet as the buffer for Tier I streams, and 100 feet for Tier II follows. The source of the research is identified and described in EPA's 2012 CGP Fact Sheet. The relevant facts are shared in this fact sheet. The selection of 50 feet as a buffer for these stream resources is consistent with EPA's CGP and neighboring jurisdictions that use the CGP or made use of the 2012 CGP fact sheet as their permit basis. Establishing buffers is also consistent with Maryland's Forest Protection requirements, as well as protections afforded under the Critical Area Commission. The considerations under this permit relate to specific erosion and sediment controls required if it is infeasible to maintain such natural buffers. Maryland's selection of a 100 feet Stream Protection Zone for Tier II watershed originates from the Department's 2011 Handbook, which recommends a minimum of 100 feet. This was based on riparian buffering recommendations adapted from Johnson, C.W. and Buffer, S. 2008. This selection is consistent with EPA's research as well (Figure 1 below "for the maintenance of the biological components of wetlands and streams"). The Handbook recommends more significant protections for steep sloped areas or where there are highly erodible soils which are addressed separately in the Handbook and in the permit.

> Purpose: To arrive at the 50 feet requirements, EPA examined many different options. Ultimately, EPA felt it was important to provide a uniform buffer performance standard, but to allow permittees the flexibility to achieve this standard without prescribing a minimum natural buffer width that must be complied with in all circumstances. EPA also determined it was appropriate to identify specific cases where compliance with this requirement is infeasible, and to specify alternative requirements in these cases. EPA first considered whether a buffer width would need to be specified at all in the permit, or whether the C&D rule language was sufficient. The C&D rule does not specify what size buffer is necessary to meet the requirement, but rather leaves this and other related determinations up to the permitting authority, including if a minimum buffer width is necessary at all. See 75 Fed. Reg. 63016-17. After considering the option of simply adopting the C&D rule language in the permit, EPA concluded that it would be appropriate to develop more specific language to be used as a permit condition. In EPA's view, to include no other requirements would leave the Agency with a permit requirement that would be difficult, if not impossible, to enforce, and would place the permittee in the position of having to guess what amount of a natural buffer is adequate to minimize the discharge of pollutants from the site, leading not only to uncertainty regarding compliance, but also inconsistencies among permitted sites. EPA believes that this permit should include minimum requirements that specify how to comply with the terms of the permit. After determining that it is appropriate to add specificity to the permit requirement, EPA evaluated different ways to articulate the permit conditions. A number of issues presented themselves during this process, which included the following:
> • How effective are natural buffers at removing sediment and other

pollutants?
• What size buffers are necessary to provide high level pollutant removal?
• What types of local and state regulations already affect the buffer area?
• Is a uniform buffer width requirement appropriate?
EPA explored all of these issues in arriving at the buffer requirements. Each are discussed in depth below.

The Pollutant Removal Effectiveness of Natural Buffers

EPA started by evaluating how effective buffers are at removing pollutants. To arrive at the minimum buffer width performance standard of 50 feet, EPA undertook a comprehensive review of the scientific literature with the goal of assessing the relationship between pollutant removal efficiency and buffer width. EPA was particularly interested in understanding the effectiveness of buffers at removing pollutants in construction site discharges. Sediment and turbidity are the most thoroughly documented pollutants associated with construction site stormwater discharges. Typical construction activities, such as clearing vegetation and excavating, moving, and compacting earth and rock increase the vulnerability of soil to the erosive powers of precipitation and stormwater runoff. Soil compaction reduces precipitation infiltration and increases overland water flow, thereby increasing the quantity of stormwater discharges available to erode soil. During precipitation events, the increased erosion can cause sediment to be discharged in stormwater from the site, which can lead to impairments of receiving waters. During the Phase I stormwater rulemaking, EPA identified nonconventional and toxic pollutants of concern in discharges from construction sites, stating "[c]onstruction sites also generate other pollutants such as phosphorus, nitrogen, and nutrients from fertilizer, pesticides, petroleum products, construction chemicals, and solid wastes." 55 Fed. Reg. 48033. These pollutants can be found in construction materials and equipment, historic site contamination, and natural soil and ground water constituents, and may be carried in stormwater in solution or adsorbed to transported sediment particles. Although EPA's focus was in determining the pollutant removal effectiveness of the buffer for pollutant parameters related to sediment, EPA took into account the ancillary benefits of buffers at removing other pollutants found in construction site stormwater discharges, particularly nitrogen and phosphorus. EPA found the scientific literature to widely support the pollutant-removal effectiveness of buffers (Wong & McCuen, 1982; Barling & Moore, 1994; Castelle et al., 1994; Schueler, 1995; Wenger, 1999; Correll, 2005; Mayer et al., 2005; Liu et al., 2008; Yuan et al., 2009). Natural buffers are particularly effective at removing sediment. Wenger found that riparian buffers reduce stream sedimentation through six different functions:
1. By displacing sediment-producing activities away from flowing water (setbacks);
2. By trapping terrestrial sediments in surface runoff;
3. By reducing the velocity of sediment-bearing storm flows, allowing sediment

to settle out of water and be deposited on land;
4. By stabilizing streambanks, preventing channel erosion;
5. By moderating stream flow during floods, reducing bed scour; and
6. By contributing large woody debris (snags); these can trap considerable sediment, at least temporarily.

Sediment removal in buffers occurs by increasing the hydraulic roughness of the flow surface, which enhances sediment deposition and filtration by vegetation. As sediment laden water flows through vegetation, the flow velocity is decreased and sediment is deposited (Barling & Moore, 1994). Coarser soil and organic particles settle more quickly than finer particles, which tend to stay in suspension. Sediment trapping performance was found to decrease as sediment particle size decreases. To capture fine suspended particles, buffers need to be wide enough to allow for infiltration (Wong & McCuen, 1982; Barling & Moore, 1994; Wenger, 1999; Liu et al., 2008). An early study on buffer sediment removal performance found the optimum distance for trapping sand, silt, and clay to be 3 m, 15 m, and 122 m, respectively (Wilson, 1967). Because nutrients are often present in construction site stormwater discharges, EPA found it useful to understand the performance of natural buffers at removing nitrogen and phosphorus. Scientific literature supports the effectiveness of buffers at removing nutrients. Because phosphorus tends to attach to sediment or organic matter, buffer widths sufficient to remove sediment are generally sufficient to remove phosphorus from construction site stormwater discharges (Wenger, 1999). However, finer sediment particles have a greater capacity to hold phosphorus than coarser particles, and therefore buffers should be sized wide enough to allow for infiltration of smaller phosphorus-attached sediment particles (Barling & Moore, 1994). Buffers were also found to be effective at removing nitrogen (Wenger, 1999). Unlike phosphorus, nitrogen is soluble, and readily moves through ground water. Buffers can remove nitrogen in surface flows through uptake by vegetation, denitrification, soil storage, ground water mixing, and microbial immobilization (Mayer et al., 2007; Wenger, 1999).

The Relationship Between Buffer Width and Pollutant Removal Effectiveness

EPA found numerous studies that examined the relationship between buffer width and pollutant removal performance (Young et al., 1980; Dillaha et al., 1989; Magette et al., 1989; Sheridan et al., 1999; Abu-Zreig et al., 2004; Peterjohn and Correll; 1984; and others). The results of these studies ranged widely, with some reporting very high sediment removal performance (i.e., over 90 percent removal) at buffer widths less than 15 feet, while others found similar sediment removal performance at widths of 80 feet or more. Many of these studies examined the efficacy of buffers under site-specific conditions, and looked at the performance of highly engineered vegetation types, such as those found in installed vegetated filter strips. EPA does not require the installation of vegetation in the buffer area, but rather requires that the existing natural vegetation not be disturbed. EPA cannot therefore reasonably

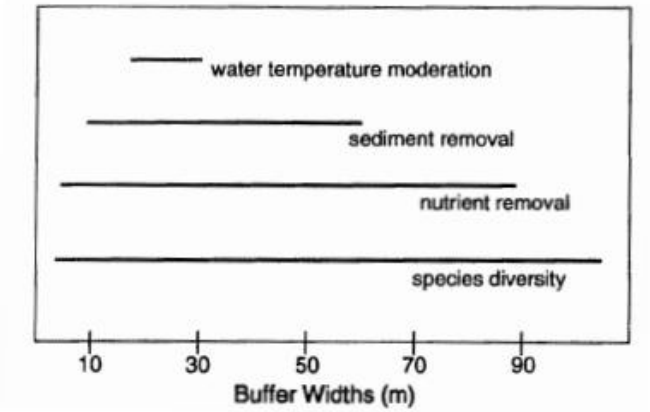
assume that a similar performance would be achieved with all types of vegetative cover that exist in all the areas where this permit is in effect. Nor can EPA assume that buffers of a specific width will perform similarly under various soil types, slopes, and other differences in site-specific conditions. Therefore, while informative, EPA found it necessary to conduct further research given that these studies alone do not offer a clear choice on what size buffers will best achieve a consistent pollutant removal performance for the range of conditions where this permit is effective. In determining the minimum buffer width to include, EPA found it useful to look at those studies that examined multiple sources of information in order to arrive at a recommendation for a minimum buffer width or a range of widths that would be most effective at removing pollutants. The studies EPA found to be particularly informative in terms of minimum buffer width requirements are included in Table 1, and are described below.

Study	Minimum Buffer Width for Sediment	Minimum Buffer Width for Nitrogen	Minimum Buffer Width for Phosphorus	Analysis Method
Castelle et al. (1994)	**33 - 200 ft**	**16 - 300 ft**	**16 - 300 ft**	Reviewed range of buffer widths in scientific literature to determine minimum buffer size requirements.
Liu et al. (2008)	**33 ft**	-	-	Applied logarithmic regression model to results of over 80 studies and predicted sediment trapping efficacy to reach its maximum at 33 feet.
Wenger (1999)	**50 - 100 ft**	**50 - 100 ft**	**50 - 100 ft**	Reviewed range of buffer widths in scientific literature to determine minimum buffer width requirements.
Yuan et al. (2009)	**>16 ft**	-	-	Applied logarithm model to results of 80 studies and predicted that buffers of 16 feet or greater remove at least 80 percent of sediment.
Mayer et al. (2005)	-	**>164 ft**	-	Performed linear and non-linear regression models on data from 89 studies to determine nitrogen removal effectiveness.

Table 1 - Summary of buffer widths for removal of sediment, nitrogen, and phosphorus from EPA's review of the scientific literature.

Castelle et al. reviewed studies that analyzed the pollutant removal functions of buffers. Among the parameters examined were sediment and nutrients. The results in Figure 1 below indicate that recommended buffer widths for sediment and nutrients in the literature vary widely. Recommended widths for sediment removal range from 33 to 200 feet, and for nutrients 16 to 300 feet. The range of widths informed Castelle et al.'s overall recommended buffer widths of 50 feet for the maintenance of physical and chemical characteristics of aquatic resources, and 100 feet for the maintenance of the biological components of wetlands and streams.

Figure 1 From Castelle et al. (1994), the range of buffer widths providing specific buffer functions.



A study by Liu, Zhang, and Zhang examined the sediment removal efficacy of buffers by performing a meta-analysis on over 80 different experiments. Figure 2 shows the results of a logarithmic regression model on the experiments that were reviewed. Liu et al. found that increasing buffer width increases sediment removal. However, the relationship between buffer widths and sediment removal is not linear. According to Liu et al., as buffer widths reach 10 m, or 33 feet, the increased removal percentage diminishes. This is explained by the fact that buffers are effective at removing a substantial percentage of coarser sediment particles within the first few meters, but larger widths are necessary to remove suspended fine sediments through infiltration. These results indicate that to remove a high percent (e.g., 90 percent or more) of sediment particles, buffer widths must be sized at a widths ranging from 33 to 50 feet.

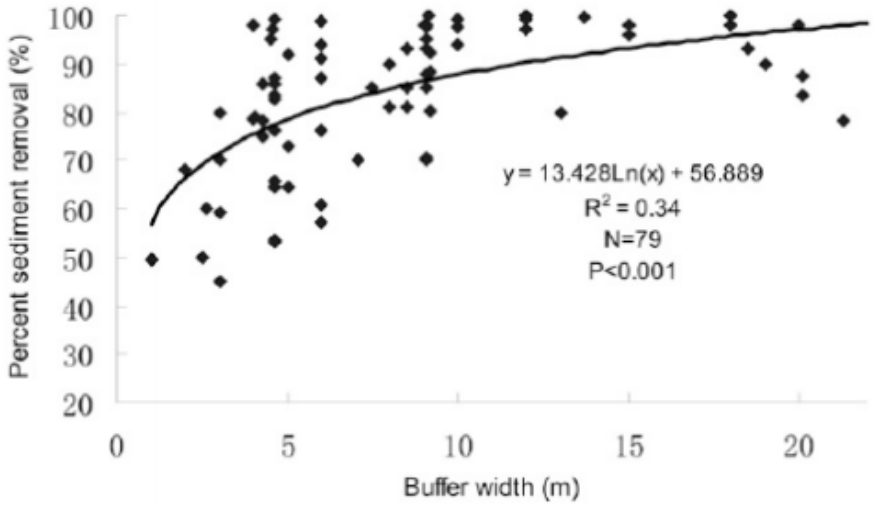
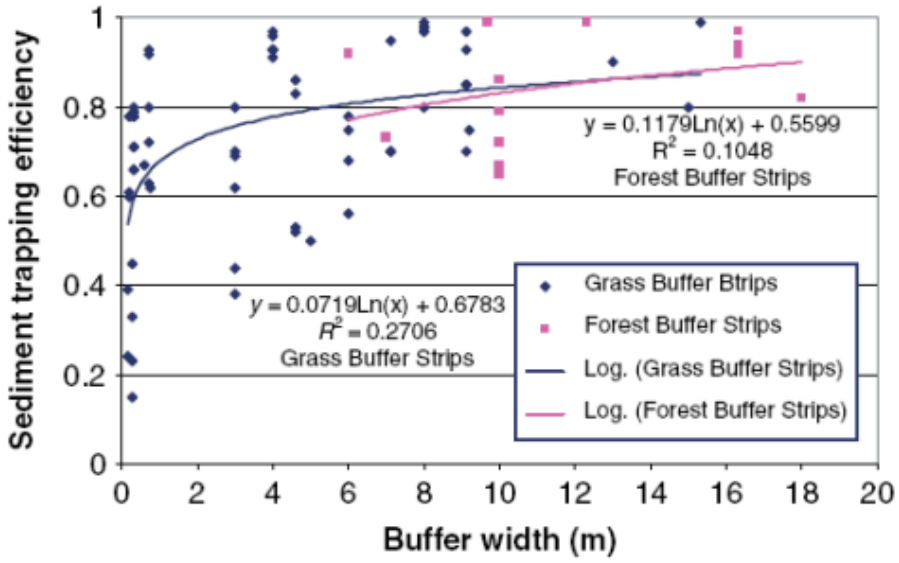


Figure 2 - From Liu et al. (2008), the relationship between buffer width and percent sediment trapping efficiency.

Yuan et al. (2009) similarly reviewed the available literature on the sediment removal performance of buffers and found that increasing buffer width increases sediment removal. Yuan et al. looked at the differences in buffer performance based on the type of

vegetation in addition to width, as shown in Figure 3. Buffer sediment removal performance did not vary widely by vegetation type, but in general, forested buffers were found to be wider than grassed buffers. Yuan et al. found that buffers of at least 5 meters, or 16 feet, are necessary to remove 80 percent of sediment. According to Figure 3, to remove higher percentages of sediment (e.g., 90 percent or more), buffers widths of at least 15 meters, or 50 feet, are necessary.

Figure 3 From Yuan et al. (2009), the relationship between buffer width, vegetation type, and percent sediment trapping efficiency.



In a 2005 report, EPA reviewed 89 riparian buffer studies to determine the relationship between nitrogen removal effectiveness and buffer width. It was concluded that nitrogen removal performance varied, but generally wider buffers (> 50 m, or 164 feet) more consistently remove more nitrogen than narrower buffers. Figure 4 shows the relationship between buffer width and nitrogen removal from surface flow. Buffers of 30, 115, and 250 meters (or 100, 380, and 820 feet) are shown to remove 50, 75, and 90 percent of nitrogen, respectively. These results indicate that while buffers are effective at removing nitrogen, wider widths are necessary to remove a significant percentage.

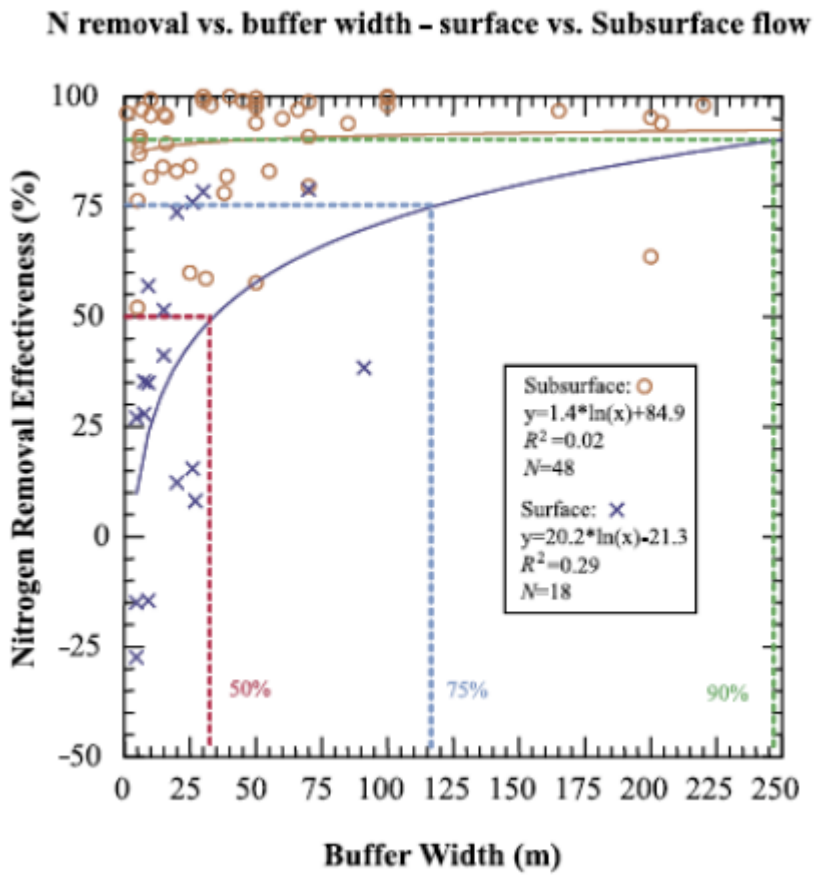


Figure 4 - From Mayer et al. (2005), the relationship between buffer width and percent nitrogen removal.

Taking all of the above information into account, EPA has concluded that while buffers are very effective at removing pollutants, because buffer performance varies from study to study, it is challenging to determine the minimum width that would be adequate for removing construction site pollutants from stormwater for the majority of sites. Buffer pollutant removal performance is not only a function of buffer width but is also a function of many other site-specific factors, including vegetation type, slope, soil type, and infiltration rate (Wenger, 1999). Despite this challenge, EPA believes it is appropriate to include a minimum fixed-width buffer to serve as a performance standard by which to achieve sufficient pollutant removal and to provide permittees with a sense of clarity about their requirements. Most studies concluded that wider buffers consistently remove higher percentages of pollutants; however, EPA's aim was to determine the minimum width necessary to achieve an adequate removal of pollutants in most circumstances. While recognizing the wide variability in buffer effectiveness, based on soil type, vegetation, slope, etc., EPA was primarily focused on determining the minimum buffer width that would generally remove a substantial majority of sediment particles, but also provide significant removal of nutrients. The recommended buffer widths EPA reviewed for sediment removal ranged from 16 to 200 feet, and for nutrients ranged from 16 to 300 feet (see Table 1). However, by reviewing analyses of multiple buffer studies, EPA was able to relate specific buffer widths to expected pollutant removal potential. Both Liu et al. and Yuan et al.'s analysis of over 80 buffer studies determined that 90 percent of sediment can

be expected to be removed from buffers of 50 feet, which can also be assumed to be of sufficient width for removing a significant percentage of sediment-attached phosphorus. Mayer et al. found buffers of 50 feet to be capable of removing 35 percent of nitrogen from surface flows. EPA concluded from these analyses that 50-foot buffers generally remove most sediment from stormwater flows through buffers, and provide ancillary benefits by removing significant amounts of nutrients. EPA also recognizes that the requirement in the C&D rule is to establish buffers "where feasible" and that feasibility is thus also an important consideration. EPA reviewed buffer width requirements in states and localities where this permit would apply to determine what is already required in these areas, and thus shed light on what is feasible. This review is summarized below. Based on its assessment of buffer effectiveness, EPA came to the conclusion that 50 feet would be an appropriate minimum buffer width performance standard to substantially reduce pollutant discharges, while EPA's review of existing state and local requirements convinced EPA that such a requirement would be "feasible," subject to certain limitation that are recognized in the "Exceptions" section of the permit *(Maryland included these in Appendix B)*. EPA thus concluded that it would be appropriate to require a 50-foot natural buffer in the permit for sites where surface waters are located on or immediately adjacent to the property on which the construction activities will occur. EPA recognizes that the pollutant removal performance of 50-foot buffers will vary from site-to-site, but based on the information reviewed, buffers of 50 feet are shown to consistently achieve significant pollutant removal benefits. Recognizing the need for flexibility, the 50-foot buffer does not represent a fixed width requirement for all sites, but rather serves as the basis for a minimum pollutant removal performance that must be achieved on the sites. This minimum pollutant removal performance can be achieved by providing the minimum width of 50 feet, or by providing alternative controls. As noted above, Maryland considers the additional protection for sensitive high quality stream resources as a prudent measure for Tier II streams.

Part III.A.2.b: Minimize Soil Compaction

Part III.A.2.b implements the C&D rule requirement to "minimize soil compaction." The requirement is intended to allow for infiltration and retention of stormwater to reduce stormwater discharge volume and velocity.

Part III.A.2.b Permit Requirements in any areas of the site where final vegetative stabilization will occur or where infiltration practices will be installed, the operator must:

i. Restrict vehicle and equipment use in these locations to avoid soil compaction; and

ii. Before seeding or planting areas of exposed soil that have been compacted, use techniques that rehabilitate and condition the soils as necessary to support vegetative growth.

To comply with this requirement, operators may either restrict vehicle and equipment use on areas that will be vegetatively stabilized or where infiltration practices will be installed, or use soil conditioning techniques to decompact soils to support vegetative growth. Specific types of soil conditioning techniques could include deep-ripping and decompaction or sub-soiling. The Department also notes that the requirement to minimize soil compaction does not apply to

areas that will not be used for final vegetative stabilization or for areas where infiltration practices will not be installed. For example, the requirements do not apply to disturbed areas that will become paved surfaces, such as roads, foundations, footings, or on embankments, or on areas where soil compaction is necessary by design.

Part III.A.2.c: Preserve Native Topsoil

Part III.A.2.c implements the C&D rule requirement to preserve topsoil, unless infeasible at 40 CFR 450.21(a)(8).

Part III.A.2.c Permit Requirements

The operator must preserve native topsoil on the site, unless infeasible.

The requirement to preserve topsoil will help to maintain the soil structure on construction sites and provides a growing medium for vegetative stabilization measures. Better vegetative stabilization reduces erosion rates of the underlying soil and also increases the infiltrative capacity of the soil, thereby reducing the amount of sediment transported to downslope sediment and perimeter controls. Topsoil can be preserved by stockpiling the native topsoil on the site for later use (e.g., for vegetative stabilization), or by limiting disturbance and removal of the topsoil and associated vegetation. For example, topsoil can be preserved by limiting clearing and grading to only those areas where necessary to accommodate the building footprint. The Department notes that some projects may be designed to be highly impervious after construction, and therefore little or no vegetation is intended to remain. In these cases, the Department recognizes that preserving topsoil at the site would not be feasible. In addition, some sites may not have space to stockpile topsoil on site for later use, in which case, it may also not be feasible to preserve topsoil. The Department notes that the language in EPA's CGP, that stockpiling of topsoil in off-site locations, or transfer of topsoil to other locations, is an acceptable practice. However, EPA notes that stormwater discharges from any construction support activities meeting the requirements of Part I.C.1.c will be subject to the permit requirements. Maryland jurisdictions maintain their own requirements that specify what type of soil must be maintained on-site and what may be removed. Nothing in this condition is meant to affect that.

Part III.A.2.d: Minimize Steep Slope Disturbances

The requirement in Part III.A.2.d implements the C&D rule requirement to "minimize the disturbance of steep slopes" at 40 CFR 450.21(a)(4).

Part III.A.2.d Permit Requirements

The operator must minimize the disturbance of "steep slopes" (as defined in Appendix A).

The permit does not prevent or prohibit disturbance on steep slopes. The Department recognizes that for some projects, disturbance on steep slopes may be necessary for construction (e.g., a road cut in mountainous terrain). If disturbances to steep slopes are required for the project, the Department would recognize that it is not feasible to avoid the

disturbance of steep slopes. The Department also notes that the requirement to minimize the disturbance of steep slopes does not apply to the creation of soil stockpiles. The Department includes EPA's incorporation by reference to the discussion in the 2012 CGP fact sheet concerning this requirement. See part 2.1.2.6 "Minimize the Disturbance of Steep Slopes" on pages 67 through 68 of the 2012 CGP fact sheet, available at https://www.epa.gov/sites/production/files/2015-10/documents/cgp2012_finalfactsheet.pdf. For information specific to Maryland requirements, refer to the 2011 Handbook.

Part III.A.2.e: Install Perimeter Controls

The perimeter control requirements in Part III.A.2.e implement the C&D rule requirement to "install effective erosion and sediment controls."

Part III.A.2.e Permit Requirements

Operators must install sediment controls, such as filter berms, silt fences, vegetative strips, and temporary diversion dikes, along any perimeter areas of the site that will receive pollutant discharges, and comply with the following perimeter control requirement:

i. Remove sediment before it has accumulated to one-half of the above-ground height of any perimeter control.

ii. Exception: For areas at "linear construction sites" (as defined in Appendix A) where perimeter controls are infeasible (e.g., due to a limited or restricted right-of-way), implement other practices as necessary to minimize pollutant discharges to perimeter areas of the site. The requirement instructs operators as to where downslope sediment controls should be installed so that they are effectively situated to minimize the discharge of pollutants on the site.

The requirement in (i) above makes operators aware that they must maintain perimeter controls so that they remain effective throughout the duration of permit coverage. This requirement implements the C&D rule requirement to "maintain effective erosion controls and sediment controls" at 40 CFR 450.21(a).

The requirement in (ii) above provides flexibility for linear construction sites by allowing them to document in the SWPPP when it is infeasible to install perimeter controls in certain areas of the site, and instead allowing the use of other types of practices that will adequately minimize pollutant discharges to perimeter areas of the site. The Department established this provision in order to recognize that for some linear projects, perimeter controls are not always feasible (e.g., due to limited available space to install perimeter controls), and that other types of practices can be employed to minimize pollutant discharges. For example, in urban areas where, due to right-of-way limitations, perimeter controls could cause a safety hazard to vehicles and/or pedestrians, perimeter controls may not be feasible. Other practices that could be implemented to minimize pollutant discharges from perimeter areas for these types of sites could include conducting earth disturbances only on days when no precipitation will occur; limiting disturbances and stabilizing areas of exposed soil

immediately; and avoiding disturbances to environmentally sensitive areas. The types of other practices to be implemented to adequately minimize pollutant discharges from perimeter areas must be based on site specific conditions and reflect good engineering judgment.

While perimeter controls may not be feasible in the above circumstances, operators are reminded of the requirement under Part III.A.1.a to account for the required design factors for their stormwater controls and their overall obligation in Part III.A to minimize sediment discharges. In addition, the operator must ensure that sediment and other pollutants, which may escape the area of disturbance onto off-site streets, other paved areas, and sidewalks, are removed consistent with the mitigation requirements in Part III.A.2.h.iv.

The Department also notes that Part III.A.2.e only applies along any perimeter areas of the site that will receive pollutant discharges. If a portion of the construction site's perimeter area does not receive pollutant discharges, perimeter controls are not required in that portion of the site. Therefore, perimeter controls are not necessary in the perimeter area surrounding construction activities in areas of sites where no pollutant discharges occur, which for certain linear construction sites could include:

- Pole sites where only overhead work is conducted;
- Use of pre-existing access roads or pad areas where no expansion or below-grade improvements (e.g., no new earth disturbances) will occur; and
- Areas where vegetation is left in place but needs to be trimmed (e.g., mowing, weed whacking, etc.) to allow temporary access (e.g., overland travel) or use of a site (e.g., wire stringing site). In such circumstances, the ground cover (i.e., grasses and other low-growing vegetation, such as mosses, ferns, vines, shrubs, herbaceous plants, and root mats that are planted or that naturally occur) is retained and no grading occurs.

Part III.A.2.f: Site Stabilization

Part III.A.2.f implements the C&D rule requirement for soil stabilization in 40 CFR 450.21(b). This part requires the operator to implement and maintain stabilization measures that minimize erosion from exposed portions of the site.

Part III.A.2.f Permit Requirements

Changes were made to this section from the previous permit. The 14-GP refers to permanent stabilization, whereas EPA or other states use the term Final Stabilization. The Department preserves the concept of permanent stabilization in the Appendix A definitions, to mean Final Stabilization; however, the 20-CP will begin to refer to this as Final Stabilization since it is vegetation and isn't really considered a permanent feature. It is subject to changes. In addition, during the drafting of the new permit, the Department found that the 14-GP contained errors in the definition for this section. Those have been corrected (i.e. implement the 2 following…when there were actually 3 following bullets). Specific stabilization requirements in Maryland are more restrictive than those requirements in EPA's CGP. Stabilization requirements in Maryland are specified in regulation (COMAR 26.17.01.07), in the 2011 Handbook as well as Department

issued guidance. The 20-CP permit specifies how those requirements are to be applied to those areas covered by the 20-CP. EPA's stabilization requirements for dischargers to Tier 2 bodies of water are equal to those in Maryland for either Tier I or Tier II, thus Maryland's Tier II requirements have not been altered in this renewal and are similar to Tier I.

Further background for the concepts identified in this Part. In the C&D rule, EPA emphasizes the importance of effective and speedy stabilization of soils exposed throughout the construction process in order to reduce the amount of soil eroded on construction sites and the amount of sediment and other pollutants discharged from the site. EPA indicates in the rule that initiating soil stabilization measures immediately after land has been disturbed and construction activity has ceased is an important non- numeric effluent limitation. EPA also states that it "sees no compelling reason why permittees cannot take action immediately to stabilize disturbed soils on their sites" (see 74 Fed. Reg. 63005, December 1, 2009). EPA also observes that erosion control measures, such as mulch, are readily available and operators need only plan accordingly to have appropriate materials and laborers present when needed.

Furthermore, "simply providing some sort of soil cover on these areas can significantly reduce erosion rates, often by an order of magnitude or more. Vegetative stabilization using annual grasses is a common practice used to control erosion. Physical barriers such as geotextiles, straw, rolled erosion control products and mulch and compost are other common methods of controlling erosion. Polymers (such as PAM) and soil tackifiers are also commonly used. These materials and methods are intended to reduce erosion where soil particles can be initially dislodged on a C&D site, either from rainfall, snow melt or up-slope runoff." See 74 Fed. Reg. 63012.

The permit carries forward these important principles and factors by incorporating specific provisions intended to implement the C&D rule's stabilization deadline requirements. The following section provides support for these provisions.

Stabilization Deadlines (Part III.A.2.f)

- Deadline to Initiate Stabilization refers the permittee to the specific portions of the Handbook related to stabilization. After initial soil disturbance or redisturbance, permanent (2011 ESC Handbook Section B-4-5) or temporary (2011 ESC Handbook Section B-4-4) stabilization is required within:

    i. Three (3) calendar days as to the surface of all perimeter controls, dikes, swales, ditches, perimeter slopes, and all slopes steeper than 3 horizontal to 1 vertical (3:1); and
    ii. Seven (7) calendar days as to all other disturbed areas on the project site except for those areas under active grading.

The State also has specific criteria laid out in COMAR 26.17.01.07.B.6(f), and the 14-GP listed the reference to that regulation with the caveat that those must be met even if approved plans have a less stringent requirement (see COMAR 26.17.01.08.G), and in the 2011 Standards and Specifications for Soil Erosion and Sediment Control or any updated standards issued by MDE (after their effective date). In review of the COMAR reference, the requirements now laid out in the Stabilization Deadlines is consistent with COMAR, is at least as restrictive as EPA's approach, and effectively is not a substantial change from the

14-GP. Listing the specific regulatory language in the permit vs just including a reference to COMAR makes it easier for the permittee to understand and comply with the requirements.

The EPA CGP permit also provides examples of activities that would constitute the immediate initiation of stabilization:

1. Prepping the soil for vegetative or non-vegetative stabilization as long as seeding, planting, and/or installation of non-vegetative stabilization products takes place as soon as practicable, but no later than 1 calendar day of completing soil preparation;

2. Applying mulch or other non-vegetative product to the exposed area;

3. Seeding or planting the exposed area;

4. Starting any of the activities in # 1 – 3 on a portion of the entire area that will be stabilized; and

5. Finalizing arrangements to have the stabilization product fully installed in compliance with the deadlines for completing stabilization.

The Department includes resources for operators and engineers on the guidelines in the 2011 MARYLAND EROSION AND SEDIMENT CONTROL DESIGN AND CONSTRUCTION MANUAL, specifically SECTION B - GRADING AND STABILIZATION.

It is important to clarify the C&D rule requirement by specifying what it means to have construction activities temporarily or permanently cease. It is also important for construction operators to understand that stabilization must begin immediately when there is no justification for leaving areas exposed. For example, if 14 days will pass between the time when clearing and grading has been completed and further construction activities will occur, there is no reason why the exposed portions of the site cannot be stabilized temporarily to prevent erosion and sediment discharge during the time of inactivity on any portion of the site. EPA clarifies in the CGP that the initiation of stabilization means that the operator has taken action to implement the stabilization measures, including, for example, finalizing arrangements to have the stabilization product delivered, scheduling the installation of the product, and/or prepping the soil. The Department looks to the C&D rule, and EPA's CGP being a model of its implementation, to provide the minimum requirements, and to build on that in cases where the State or Local authorities determine more restrictive stabilization is required.

Exceptions to the Deadlines for Initiating and Completing Stabilization

The Department notes that with respect to the exception to the final stabilization criteria for restored agricultural areas, the permit retains the requirement from the 14-GP that areas disturbed that were not previously used for agricultural activities, and areas that are not being returned to preconstruction agricultural use, are not covered by the exception and must meet the conditions for stabilization.

EPA's permit acknowledges that some portions of some projects are intended to be left

unvegetated or unstabilized following construction. An example would be a dirt access road or a utility pole pad where the final plan calls for the area to remain a dirt road or an unstabilized pad. EPA does not expect temporary or permanent stabilization measures to be applied to these areas. EPA notes that for the purposes of this permit, "exposed portions of your site" means areas of exposed soil that are required to be stabilized. The Department has included this exception in this section.

Part III.A.2.g: Direct Stormwater to Vegetated Areas

Part III.A.2.g implements the C&D rule requirement at 40 CFR 450.21(a)(6). This requirement reduces the discharge of sediment and other pollutants through filtration and infiltration.

Part III.A.2.g Permit Requirements

Direct stormwater to vegetated areas and maximize stormwater infiltration and filtering to reduce pollutant discharges, unless infeasible.

Operators can comply with this requirement by directing non-erosive flows leaving silt fences, filter berms, or other perimeter controls and sediment basins to natural buffers adjacent to streams or other vegetated areas on or adjacent to the property on which the construction activities will occur. Note that some site operators have found the use of level spreaders or other practices to be effective to prevent erosive discharges. These practices will help to prevent the formation of gullies and associated erosion. Examples of where it may be infeasible to direct discharges from stormwater controls to vegetated areas include those areas where pervious or vegetated areas within the project footprint are non- existent, such as in some highly urban areas.

Part III.A.2.h: Minimize tracking of sediment at entrance or exit from construction site

Collectively, the requirements in Part III.A.2.h will result in the minimization of sediment that can be tracked out from the site onto paved surfaces and subsequently discharged in stormwater. The following practices are required for minimizing sediment track-out:

Part III.A.2.h Permit Requirements

i. Restrict vehicle use to properly designated exit points;

ii. Use appropriate stabilization techniques (e.g., use of aggregate stone with an underlying geotextile or non-woven filter fabric, and turf mats such as those found in 2011 ESC Handbook Section B-1 or B-2) at all points that exit onto paved roads. I. *Note that EPA's CGP Exception where "Stabilization is not required for exit points at linear utility construction sites that are used only episodically and for very short durations over the life of the project" has not been included in this permit. Proper stabilization is required on all construction sites.*

iii. Implement additional track-out controls (e.g., wheel washing, rumble strips, and rattle plates) as necessary to ensure that sediment removal occurs prior to vehicle exit;

and

iv. Where sediment has been tracked out from your site onto paved roads, sidewalks, or other paved areas outside of your site, remove the deposited sediment by the end of the same business day in which the track-out occurs or by the end of the next business day if track-out occurs on a non-business day. Remove the track-out by sweeping, shoveling, or vacuuming these surfaces, or by using other similarly effective means of sediment removal. You are prohibited from hosing or sweeping tracked-out sediment into any stormwater conveyance, storm drain inlet, or water of the U.S.

The requirement to restrict vehicle use to properly designated exit points in (i) above, the requirement for appropriate stabilization techniques at all points that exit onto paved roads in (ii) above, and the requirement for the use of additional controls as necessary to ensure that sediment removal occurs prior to vehicle exit in (iii) above, implement the C&D rule requirement to "minimize sediment discharges from the site." The requirement in (ii) above also implements the C&D rule requirement to "minimize the amount of soil exposed during construction activity." The requirement in (d) above implements the C&D rule requirements to "minimize sediment discharges" and the requirement to "minimize the discharge of pollutants from equipment and vehicle washing …."

In the exception language in (ii), EPA acknowledges that the use of exit points for certain narrow linear utility projects can differ from traditional residential or commercial construction projects, where the same exit points are consistently used throughout the life of a project. Linear utility project disturbances, which include natural gas and electric transmission lines, typically consist of multiple disconnected areas of disturbance associated with access roads, stringing pull stations, laydown/staging yards, and pads. Maryland may consider this exception for future permit renewals, but is not including it at this time. .

We note that EPA no longer allows for hosing down or sweeping pollutants into a stormwater conveyance where it is connected to a sediment basin, sediment trap, or similarly effective controls. Upon further consideration, EPA is concerned that this practice will lead to these controls being compromised, and that sweeping, shoveling, and vacuuming are standard and readily available approaches for removing sediment track-out.

Part III.A.2.i: Minimize Dust

The requirement is intended to minimize the discharge of sediment in stormwater from the generation of dust.

Part III.A.2.i Permit Requirements

On areas of exposed soil, the operator must minimize dust through the appropriate application of water or other dust suppression techniques to control the generation of pollutants that could be discharged in stormwater from the site.

Dust suppression techniques prevent dust from being generated, minimizing the potential for the dust to accumulate where it is likely to discharge from the site in stormwater discharges.

Part III.A.2.j: Sediment Trap or Basin

Part III.A.2.j This section is new to the permit and was adopted from the EPA CGP, to outline the minimum requirements that will apply to installation of sediment basins or similar impoundments. However, the concepts are already included in Maryland's 2011 Handbook and thus the reference to the Handbook is included in the condition.

Sediment basins are often used on construction sites to minimize sediment discharges. They are typically placed at or near low points of drainageways in order to temporarily detain stormwater discharges, allowing sediment particulates to settle. Sediment basins are also often designed to reduce peak flowrates, reducing downstream flooding and channel erosion. At the point of discharge, which is typically a pipe or channel, installation of riprap or other stabilization measures is often necessary because the concentrated discharge can cause erosion and additional pollutant discharges to Waters of This State. Sediment basins are also often designed to reduce flow duration impacts by reducing the total volume of stormwater being discharged or by providing extended detention to reduce discharge rates. The purpose of the requirements in this part is to provide specific design and maintenance requirements for the proper implementation of sediment basins, if used on a site.

The requirements implement the following C&D rule requirement: "When discharging from basins and impoundments, utilize outlet structures that withdraw water from the surface, unless infeasible." EPA notes in the permit that the circumstances in which it will be infeasible to design outlet structures in this manner should be rare. Exceptions may include areas with extended cold weather and where using surface outlets may not be feasible during certain time periods (although it is expected that they would be used during other periods). If the operator determines that it is infeasible to meet this requirement, the operator must provide documentation in the SWPPP to support its determination, including the specific conditions or time periods when this exception will apply.

Part III.A.2.k: Protect Storm Drain Inlets

Part III.A.2.k implements the C&D rule requirement to "minimize sediment discharges from the site" by requiring stormwater inlets to be protected with sediment controls during construction.

Part III.A.2.k Permit Requirements

i. Install inlet protection measures that remove sediment from discharges prior to entry into any storm drain inlet that carries stormwater flow from your site to a Water of This State, provided you have authority to access the storm drain inlet (2011 ESC Handbook Section E-9); and

ii. Clean, or remove and replace, the protection measures as sediment accumulates, the filter becomes clogged, and/or performance is compromised. Where there is evidence of sediment accumulation adjacent to the inlet protection measure, remove the deposited sediment by the end of the same business day in which it is found or by the end of the following business day if removal by the same business day is not feasible.

Inlet protection measures prevent sediment-laden stormwater from being discharged into storm drains, and ultimately surface waters. The maintenance requirements in (ii) support the need for the inlet measures to be kept in working condition so that they are effective at preventing the discharge of pollutants. Note that inlet protection measures can be removed in the event of flood conditions or to prevent erosion.

Note that under the 20-CP, the Department requires installation of inlet protection measures to any storm drain inlet that carries stormwater flow from the site to Waters of this State that you have authority to access, even if it is first directed to a sediment basin, sediment trap, or similarly effective controls. The Department is concerned that if the sediment basin, sediment trap, or similarly effective controls were to be compromised, unprotected inlets that receive stormwater from these controls would also be compromised.

Part III.A.2.l: Minimize Erosion of Stormwater Conveyances

Part III.A.2.l implements the C&D rule requirement to "control stormwater discharges… to minimize channel and streambank erosion and scour in the immediate vicinity of discharge points."

Part III.A.2.l Permit Requirements

The operator must control stormwater discharges, including both peak flowrates and total stormwater volume, to minimize channel and streambank erosion and scour in the immediate vicinity of discharge points.

Examples of control measures that can be used to comply with this requirement include the use of erosion controls and/or velocity dissipation devices (e.g., check dams, sediment traps), within and along the length of a stormwater conveyance and at the outfall to slow down runoff.

Part III.A.2.m: Use of Treatment Chemicals

EPA allowed for use of Chemical Additives in their 2012 permit, at a time when they were considering turbidity limits, understanding that Chemical Additives are required for various soil profiles that contain clay fines that do not readily settle with conventional practices. During that time they had performed intensive research in to toxicity and various concerns with the products. EPA's Fact Sheet incorporates by reference (which the Department made use of) the discussion in the 2012 CGP fact sheet concerning the agency's rationale supporting these requirements. See section "Use of Treatment Chemicals. (Part 2.1.3.3)" on pages 71 through 75 of the 2012 CGP fact sheet, available at https://www.epa.gov/sites/production/files/2015-10/documents/cgp2012_finalfactsheet.pdf.

Cationic chemical additives pose a higher risk to aquatic life because they bind to fish gills. As a result, the EPA and other states we researched include separate provisions in CGPs for use of anionic and cationic additives. MDE places a higher standard on the cationic chemicals, and can require residual testing, pH testing or place other controls as necessary for those sites where use of cationic chemicals is identified in the NOI. The anionic chemicals can be chosen from the list https://mdewwp.page.link/MDFlocs once a product has been verified by an overview of test results.

Part III.A.2.m establishes the minimum requirements that apply to the use of treatment chemicals at permitted construction sites. These are new to Maryland's permit. Although we borrowed the structure from EPA CGP, the Department had specific requirements that would help to streamline the process and rather than rely on the EPA Region to make a call on Cationic Chemicals, the intent of the language was to provide the requirements and expectations in the permit. We did look to other States to provide input to the process, and found the toxicity evaluation and listing of chemicals that had been reviewed in both North Carolina and Wisconsin to be useful guides. Both States use EPA methods to use WET tests performed with the additive to determine concentrations that are toxic. In this way they can specify concentrations that are acceptable. The Department intends to require Safety Data Sheets (SDS) and Whole Effluent Toxicity (WET) test results for any chemical additives the operators may want to use. Once the Department reviews the information, the product and maximum concentrations will be posted on MDE website https://mdewwp.page.link/MDFlocs. In this way operators can choose the more commonly used additives and be confident in their use, in order to protect Waters of this State. The 15-MM permit initially proposed a process to require additive information on the NOI (similar to EPA), and the 17-HT General Permit (Maryland Permit which includes safe use of chemicals for Dewatering) further refined the process to what is being proposed in this permit. The permit requirements follow:

m. If you are using chemical additives (defined in Appendix A) for control of sediment (such as polymers or flocculants) at your site, you must comply with the requirements identified in this section. You shall refer to the most current version of Standards for Use of Chemical Additives for Sediment Control document available on the Department's website for specific instructions on information which must be included in your SWPPP, additional requirements, and assistance in applying for additive use.

i. The use of chemical additives for sediment control should only be considered in the event that water quality standards cannot be met using conventional best management practices.
ii. Should the use of chemical additives be necessary, you must utilize conventional best management practices for erosion and sediment controls prior to and after the application of chemical additives.
iii. Additives may only be applied where treated stormwater is directed to a sediment control (e.g., sediment basin, perimeter control) prior to discharge. This permit intends to authorize additives used to create flocculation of suspended materials in stormwater or groundwater. It does not authorize use of additives for bank or soil stabilization.
iv. Chemical additives must be approved by the Department prior to use. The Department maintains a current list of pre-approved polymers/flocculants including approved application method and maximum allowable dosage concentration or application rate on its website (https://mdewwp.page.link/MDFlocs).
v. If you wish to use a chemical additive which is not found on the approved list, you must

request approval by following the Department's Procedures for Review of Chemical Additives for Sediment Control. You may not begin use of any chemical additive absent from the pre- approved list until you receive written approval from the Department.

vi. You are required to identify all additives you will be using on your Notice of Intent (pursuant to Part II.A.1 of this permit). If you wish to change to or add another preapproved chemical, you shall provide notification to the Industrial and General Permits Division within 30 days of commencing the use of the new pre-approved additive.

vii. You must minimize exposure of stored chemicals to stormwater. Store all treatment chemicals in leakproof containers that are kept under storm-resistant cover and surrounded by secondary containment structures (e.g., spill berms, decks, spill containment pallets), or provide equivalent measures designed and maintained to minimize the potential discharge of treatment chemicals in stormwater or by any other means (e.g., storing chemicals in a covered area, having a spill kit available on site and ensuring personnel are available to respond expeditiously in the event of a leak or spill).

viii. You must comply with relevant local requirements affecting the use of chemical additives. If requested by the E&SC plan approval authority, provide an SDS with your E&SC plan.

ix. You must use chemical additives and chemical treatment systems in accordance with good engineering practices, and with dosing specifications and sediment removal design specifications provided by the provider/supplier of the applicable chemicals.

x. You must document any departures from good engineering practices or dosing specifications and sediment removal design specifications provided by the provider/supplier of the applicable chemicals.

xi. Selection of additives and dosing rates should be determined based on site-specific test results. Documentation of the chemical selection process and dosing rate determination shall be included in your SWPPP. Dosing rates cannot exceed those found on the Department's list of pre-approved additives.

xii. Ensure that all persons who handle and use chemical additives at the site are provided with appropriate, product-specific training. At a minimum, this training must cover proper dosing requirements and safe handling practices.

xiii. You must notify and receive approval from the Department's Industrial and General Permits Division at least 30 days prior to using cationic chemical additives (as defined in Appendix A).

xiv. To receive authorization to use cationic chemical additives under this permit, you must identify in your SWPPP appropriate controls and implementation procedures (including where the chemical is applied, description of active treatment systems required, dosing, filtering, pH monitoring, etc.) designed to ensure that your use of cationic chemical additives will not lead to a violation of water quality standards. See the Standards for Use of Chemical Additives for Sediment Control document for additional instructions for completing your SWPPP and requesting use of cationic chemical additives.

xv. A copy of the SWPPP section regarding use of cationic chemical additives must be submitted along with the NOI and Request for Use of Cationic Chemical Additives form. You are required to comply with all such requirements if the Department has authorized you to use cationic chemical additives at your site.

xvi. Depending on the additive selected for use, you may be required to sample discharges and test for residuals or other components. Any such monitoring requirement will be laid out in your registration letter. Results of required monitoring shall be maintained with the SWPPP and made available if requested by Department personnel.

xvii. Authorization is conditioned on your compliance with additional requirements necessary to ensure that the use of such chemicals will not cause an exceedance of water quality standards. If you use polymers and/or other chemical treatments as part

of your controls, you must identify the polymers and/or chemicals used and the purpose in your SWPPP.

Part III.A.2.n: The permittee shall consider all listed rare, threatened, and endangered species and/or their habitat

This condition is carried over from the 14-GP, to provide protections for endangered or threatened species and their critical habitat. "The permittee shall consider Federal and State listed rare, threatened, and endangered species habitat in the design of the erosion and sediment control plan in accordance with the 2011 Standards and Specifications for Soil Erosion and Sediment Control, Section A-4. If rare, threatened, and endangered species habitat is identified, the permittee shall contact the appropriate approval authority to determine additional regulatory requirements."

Part III.A.2.o: Manage Stockpiles or Land-Clearing Debris Piles

The requirements in this section are new to this permit and are adopted from the EPA CGP and are intended to prevent the discharge of sediment from stockpiled soil and dirt on the site. It is consistent with the State's 2011 ESC Handbook Section B-4-8.

Part III.A.2.o Permit Requirements

Operators must manage stockpiles or land clearing debris piles composed, in whole or in part, of sediment and/or soil.

a. Locate the piles outside of any natural buffers established under Part III.A.2.a and away from any stormwater conveyances, drain inlets, and areas where stormwater flow is concentrated;

b. Install a sediment barrier along all downgradient perimeter area (e.g., include berms, dikes, fiber rolls, silt fences, sandbags, gravel bags, or straw bale);

c. For piles that will be unused for 14 or more days, provide cover (e.g., tarps, blown straw and hydroseeding) or appropriate temporary stabilization (consistent with Part III.A.2.f); and

d. You are prohibited from hosing down or sweeping soil or sediment accumulated on pavement or other impervious surfaces into any stormwater conveyance, storm drain inlet, or Waters of This State.

We note that it is EPA's judgment that cover or appropriate temporary stabilization for these piles, such as tarps, blown straw, and hydroseeding, are all readily available and common erosion and sediment control products and technologies that operators will likely already be using to comply with the stabilization requirements. The use of these technologies for covering or temporarily stabilizing stockpiles when piles are inactive poses a small incremental cost relative to the total cost of all other stormwater controls on the site. In addition, some cover technologies, such as tarps, can be reused multiple times on the same site due to their durability and longevity.

Some states have similar requirements for stockpile cover or stabilization. For example, Delaware's sediment and stormwater regulations state that "Following soil disturbance or redisturbance, Permanent or Temporary Stabilization shall be completed for perimeter sediment controls, topsoil stockpiles, and all other disturbed or graded areas on the project site within 14 calendar days unless more restrictive Federal requirements apply." [Delaware Department of Natural Resources and Environmental Control, Regulations Governing the Control of Water Pollution, Section 9.1.02, known as Special Conditions for Stormwater Discharges Associated with Construction Activities. Available at http://regulations.delaware.gov/AdminCode/title7/5000/5101.pdf] Another example is in Minnesota's CGP, which states "The Permittee(s) must stabilize all exposed soil areas (including stockpiles).

Stabilization must be initiated immediately to limit soil erosion whenever any construction activity has permanently or temporarily ceased on any portion of the site and will not resume for a period
exceeding 14 calendar days." [Minnesota Pollution Control Agency, General Permit Authorization to Discharge Stormwater associated with Construction Activity under the National Pollutant Discharge Elimination System/ State Disposal System Program. Available at https://www.pca.state.mn.us/sites/default/files/wq-strm2-68a.pdf] North Dakota CGP stabilization requirements for exposed soil also cover stockpiles that are not temporary, defined as land being idle for 14 or more calendar days. [North Dakota Department of Health, Authorization to Discharge Under the North Dakota Pollutant Discharge Elimination System - Stormwater Associated with Construction Activity, page 25. Available at http://www.ndhealth.gov/WQ/Storm/Construction/NDR10per20150401F.pdf]

c. Part III.A.3: Pollution Prevention Requirements

Part III.A.3 Implements the C&D rule requirements in 40 CFR 450.21(d) and (e) for pollution prevention measures and prohibited discharges.

Part III.A.3 Permit Requirements

The permit requires operators to implement pollution prevention controls in accordance with the requirements in Part III.A.3 to minimize the discharge of pollutants in stormwater and to prevent the discharge of pollutants from spilled or leaked materials from construction activities.

Part III.A.3.a: Equipment and Vehicle Fueling and Maintenance Requirements

Part III.A.3.a implements the 40 CFR 450.21(d)(3) requirement to "minimize the discharge of pollutants from spills and leaks and implement chemical spill and leak prevention and response procedures" and the 40 CFR 450.21(e)(3) requirement prohibiting the discharge of "fuels, oils, or other pollutants used in vehicle and equipment operation and maintenance."

Part III.A.3.a Permit Requirements

The operator must comply with the following requirements:

i. Provide an effective means of eliminating the discharge of spilled or leaked chemicals, including fuels and oils, from these activities;

ii. If applicable, comply with the Spill Prevention Control and Countermeasures (SPCC) requirements in 40 CFR part 112 and Section 311 of the CWA;

iii. Ensure adequate supplies are available at all times to handle spills, leaks, and disposal of used liquids;

iv. Use drip pans and absorbents under or around leaky vehicles;

v. Dispose of or recycle oil and oily wastes in accordance with other federal, state, tribal, or local requirements; and

vi. Clean up spills or contaminated surfaces immediately, using dry clean up measures (do not clean contaminated surfaces by hosing the area down), and eliminate the source of the spill to prevent a discharge or a continuation of an ongoing discharge.

Examples of effective means of eliminating the discharge of spilled or leaked chemicals include, but are not limited to, locating activities away from Waters of This State and stormwater inlets or conveyances so that stormwater coming into contact with these activities cannot reach Waters of This State; providing secondary containment (e.g., spill berms, decks, spill containment pallets) and cover where appropriate; and having a spill kit available on site and ensuring personnel are available to respond expeditiously in the event of a leak or spill.

Part III.A.3.b: Equipment and Vehicle Washing Requirements

Part III.A.3.b implements the 40 CFR 450.21(d)(1) requirement to "Minimize the discharge of pollutants from equipment and vehicle washing, wheel wash water, and other wash waters. Wash waters must be treated in a sediment basin or alternative control that provides equivalent or better treatment prior to discharge."

Part III.A.3.b Permit Requirements

The operator must comply with the following requirements:

i. Provide an effective means of minimizing the discharge of pollutants from equipment and vehicle washing, wheel wash water, and other types of wash waters;

ii. Ensure there is no discharge of soaps, solvents, or detergents in equipment and vehicle wash water; and

iii. For storage of soaps, detergents, or solvents, provide either (1) cover (e.g., plastic sheeting, temporary roofs) to minimize the exposure of these detergents to precipitation and to stormwater, or (2) a similarly effective means designed to minimize the discharge of pollutants from these areas.

The requirement that operators must properly manage wash waters reduces the discharge of pollutants, such as sediment and other pollutants, from the site. Examples provided in the permit for providing an effective means of minimizing the discharge of pollutants from the washing of equipment or vehicles include, but are not limited to, locating activities away from surface waters and stormwater inlets or conveyances and directing wash waters to a sediment basin or sediment trap, using filtration devices, such as filter bags or sand filters, or using other similarly effective controls. This requirement also implements the 40 CFR 450.21(e)(4) prohibition against discharging soaps or solvents, and is consistent with the eligibility condition that allows the use of non-stormwater wash waters as long as they do not contain soaps, solvents, or detergents.

Part III.A.3.c: Storage, Handling, and Disposal Requirements

Part III.A.3.c requires operators to comply with specific pollution prevention standards for activities that may result in pollutant discharges.

Part III.A.3.c Permit Requirements

The operator must comply with the following requirements:

i. For building materials and building products (e.g., asphalt sealants, copper flashing, roofing materials, adhesives, concrete admixtures, and gravel and mulch stockpiles), provide either (1) cover (e.g., plastic sheeting, temporary roofs) to minimize the exposure of these products to precipitation and to stormwater, or (2) a similarly effective means designed to minimize the discharge of pollutants from these areas. Minimization of exposure is not required in cases where the exposure to precipitation and to stormwater will not result in a discharge of pollutants, or where exposure of a specific material or product poses little risk of stormwater contamination (such as final products and materials intended for outdoor use).

ii. For pesticides, herbicides, insecticides, fertilizers, and landscape materials:

* In storage areas, provide either (1) cover (e.g., plastic sheeting, temporary roofs) to minimize the exposure of these chemicals to precipitation and to stormwater, or (2) a similarly effective means designed to minimize the discharge of pollutants from these areas; and

* Comply with all application and disposal requirements included on the registered pesticide, herbicide, insecticide, and fertilizer label (see also Part 2.3.5).

iii. For diesel fuel, oil, hydraulic fluids, other petroleum products, and other chemicals:

* Store chemicals in water-tight containers, and provide either (1) cover (e.g., plastic sheeting, temporary roofs) to minimize the exposure of these containers to precipitation and to stormwater, or (2) a similarly effective means designed to minimize the discharge of pollutants from these areas (e.g., having a spill kit available on site and ensuring personnel are available to respond expeditiously in the event of a leak or spill), or provide secondary containment (e.g., spill berms, decks, spill containment pallets); and

* Clean up spills immediately, using dry clean-up methods where possible, and dispose of used materials properly. The operator is prohibited from hosing the area down to clean surfaces or spills. Eliminate the source of the spill to prevent a discharge or a furtherance of an ongoing discharge.

iv. For hazardous or toxic wastes:

* Separate hazardous or toxic waste from construction and domestic waste;

* Store waste in sealed containers, which are constructed of suitable materials to prevent leakage and corrosion, and which are labeled in accordance with applicable Resource Conservation and Recovery Act (RCRA) requirements and all other applicable federal, state, tribal, or local requirements;

* Store all outside containers within appropriately-sized secondary containment (e.g., spill berms, decks, spill containment pallets) to prevent spills from being discharged, or provide a similarly effective means designed to prevent the discharge of pollutants from these areas (e.g., storing chemicals in a covered area, having a spill kit available on site);

* Dispose of hazardous or toxic waste in accordance with the manufacturer's recommended method of disposal and in compliance with federal, state, tribal, and local requirements;

* Clean up spills immediately, using dry clean-up methods, and dispose of used materials properly. The operator is prohibited from hosing the area down to clean surfaces or spills. Eliminate the source of the spill to prevent a discharge or a furtherance of an ongoing discharge; and

* Follow all other federal, state, tribal, and local requirements regarding hazardous or toxic waste.

v. For construction and domestic wastes:

* Provide waste containers (e.g., dumpster, trash receptacle) of sufficient size and number to contain construction and domestic wastes;

* Keep waste container lids closed when not in use and close lids at the end of the business day for those containers that are actively used throughout the day. For waste containers that do not have lids, provide either (1) cover (e.g., a tarp, plastic sheeting, temporary roof) to minimize exposure of wastes to precipitation, or (2) a similarly effective means designed to minimize the discharge of pollutants (e.g., secondary containment);

* Clean up and dispose of waste in designated waste containers; and

* Clean up immediately if containers overflow.

vi. For sanitary waste, position portable toilets so that they are secure and will not be

tipped or knocked over, and located away from Waters of This State and stormwater inlets or conveyances.

The Department acknowledges how EPA incorporates by reference the discussion in the 2012 CGP fact sheet concerning these requirements. See section VII.3.3 "Pollution Prevention Standards (Part 2.3.3)" on pages 83 through 87 of the 2012 CGP fact sheet, available at https://www.epa.gov/sites/production/files/2015-10/documents/cgp2012_finalfactsheet.pdf.

Part III.A.3.d: Applicator and Container Washing Requirements

Part III.A.3.d implements the requirements of 40 CFR 450.21(e)(1) and (e)(2). The requirements apply to the washing of applicators and containers used for stucco, paint, concrete, form release oils, curing compounds, or other materials.

Part III.A.3.d Permit Requirements

i. Direct wash water into a leak-proof container or leak-proof and lined pit designed so that no overflows can occur due to inadequate sizing or precipitation;

ii. Handle washout or cleanout wastes as follows:

* Do not dump liquid wastes in storm sewers or Waters of This State;

* Dispose of liquid wastes in accordance with applicable requirements in Part III.A.3.c; and

* Remove and dispose of hardened concrete waste consistent with your handling of other construction wastes in Part III.A.3.c; and

iii. Locate any washout or cleanout activities as far away as possible from Waters of This State and stormwater inlets or conveyances, and, to the extent feasible, designate areas to be used for these activities and conduct such activities only in these areas.

Part III.A.3.e: Fertilizer Application Requirements

The fertilizer discharge restrictions in Part 2.3.5 of EPA's CGP are included to prevent the discharge of nutrients in stormwater and to further implement the C&D rule requirement to "minimize the discharge of pollutants" at 40 CFR 450.21(d) and including Agriculture Article § 8-803.4 (Maryland Fertilizer Law for application of commercial fertilizer,).

Part III.A.3.e Permit Requirements

The following requirements apply if the operator will be applying fertilizer on the construction site:

i. Apply at a rate and in amounts consistent with manufacturer's specifications, or document in the SWPPP departures from the manufacturer specifications where appropriate in accordance with Part III.F;

ii. Apply at the appropriate time of year for your location, and preferably timed to coincide as closely as possible to the period of maximum vegetation uptake and growth;

- Avoid applying before heavy rains that could cause excess nutrients to be discharged;
- Never apply to frozen ground;
- Never apply to stormwater conveyance channels; and

iii. Follow all other federal, state, tribal, and local requirements regarding fertilizer application, including Agriculture Article § 8-803.4.

Part III.A.3.f: Emergency Spill Notification

Part III.A.3.f prohibits the discharge of toxic or hazardous substances from a spill or other release and requires operators to comply with federal reporting requirements of 40 CFR Part 110, Part 117, and Part 302 in the event that a leak, spill, or other release contains a toxic or hazardous substance in an amount equal to or in excess of a reportable quantity.

Part III.A.3.f Permit Requirements

The permit prohibits operators from discharging toxic or hazardous substances from a spill or other release. Furthermore, where a leak, spill, or other release containing a hazardous substance or oil in an amount equal to or in excess of a reportable quantity established under either 40 CFR Part 110, 40 CFR Part 117, or 40 CFR Part 302 occurs during a 24-hour period, the operator must notify the National Response Center (NRC) at (800) 424-8802 or, in the Washington, DC metropolitan area, call (202) 267-2675 in accordance with the requirements of 40 CFR Part 110, 40 CFR Part 117, and 40 CFR Part 302 as soon as the operator has knowledge of the release. Operators must also, within seven (7) calendar days of knowledge of the release, provide a description of the release, the circumstances leading to the release, and the date of the release. State, tribal, or local requirements may necessitate additional reporting of spills or discharges to local emergency response, public health, or drinking water supply agencies.

d. Part III.A.4: Construction Dewatering Requirements

Part III.A.4 implements the C&D rule requirement that prohibits "discharges from dewatering activities, including discharges from dewatering of trenches and excavations" unless managed by "appropriate
controls."

Part III.A.4 (III.A.4.a – III.A.4.g) Permit Requirements
The operator must comply with the following requirements to minimize the discharge of pollutants in ground water or accumulated stormwater that is removed from excavations, trenches, foundations, vaults, or other similar points of accumulation, in accordance with Part I.C.2 of the permit:

III.A.4.a. Treat dewatering discharges with controls to minimize discharges of pollutants (e.g., appropriate controls include sediment basins or sediment traps, sediment socks, dewatering tanks, tube settlers, weir tanks, filtration systems (e.g., bag or sand filters) and passive treatment systems that are designed to remove sediment; appropriate controls to use downstream of dewatering controls to minimize erosion include vegetated buffers, check dams, riprap, and grouted riprap at outlets). Appropriate controls are identified in the 2011 ESC Handbook Section F, and may also require use of chemical additives as provided in this

permit that are designed to remove sediment. Appropriate controls to use downstream of dewatering controls to minimize erosion include vegetated buffers, check dams, riprap, and grouted riprap at outlets;

III.A.4.b. Do not discharge visible floating solids or foam;

III.A.4.c. Use an oil-water separator or suitable filtration device (such as a cartridge filter) that is designed to remove oil, grease, or other products if dewatering water is found to contain these materials;

III.A.4.d. To the extent feasible, use vegetated, upland areas of the site to infiltrate dewatering water before discharge. The operator is prohibited from using Waters of This State as part of the treatment area;

III.A.4.e. At all points where dewatering water is discharged, comply with the velocity dissipation requirements of Part 2.2.11;

III.A.4.f. With backwash water, either haul it away for disposal or return it to the beginning of the treatment process; and

III.A.4.g. Replace and clean the filter media used in dewatering devices when the pressure differential equals or exceeds the manufacturer's specifications.

The specific restrictions in Part III.A.4 provide the permit's interpretation of what is meant by "appropriate controls" in the C&D rule. These specific requirements, in part, also implement the C&D rule requirements to control peak flowrates and total stormwater volume (40 CFR 450.21(a)(2)), to minimize sediment discharges (40 CFR 450.21(a)(5)), and to direct stormwater to vegetated areas (40 CFR 450.21(a)(6)).

18. Part III.B: Water Quality-Based Effluent Limitations

This 20-CP includes water quality-based effluent limits (WQBELs), which are additions to the 14-GP approach, in order to control discharges as necessary to more effectively meet applicable water quality standards. The provisions of Part III.B constitute the WQBELs of the permit and supplement the permit's technology-based effluent limits in Part III.A.

Part III.B.1: General Effluent Limitation to Meet Applicable Water Quality Standards

Part III.B.1 requires that all operators control their stormwater discharges as necessary to meet applicable water quality standards, consistent with 40 CFR 122.44(d)(1).

Part III.B.1 Permit Requirements

The permit requires discharges of stormwater to be controlled as necessary to meet applicable water quality standards.

In EPA's CGP, the absence of information demonstrating otherwise, EPA expects that compliance with the conditions in this permit will result in stormwater discharges being

controlled as necessary to meet applicable water quality standards. In a similar fashion, the Department has similar expectations. If at any time the operator becomes aware, or the Department determines, that the discharge is not being controlled as necessary to meet applicable water quality standards, the operator must take corrective action as required in Parts III.D.1 and III.D.2, and document the corrective actions as required in Part III.D.3. This is a change from the previous permit, which dealt only with the "Prevention of the Discharge of Significant Amounts of Sediment".

The Department may also insist that the operator install additional controls (to meet the narrative water quality-based effluent limit above) on a site-specific basis, or require the operator to obtain coverage under an individual permit, if information in the NOI or from other sources indicates that the operator's discharges are not controlled as necessary to meet applicable water quality standards. This includes situations where additional controls are necessary to comply with a wasteload allocation in an EPA-established or approved TMDL.

If during the operator's coverage under a previous permit, the operator was required to install and maintain stormwater controls specifically to meet the assumptions and requirements of an EPA- approved or established TMDL (for any parameter) or to otherwise control the discharge to meet water quality standards, the operator must continue to implement such controls as part of coverage under this permit.

To support the Department's expectation that compliance with the conditions and effluent limitations in this permit will result in discharges that meet applicable water quality standards, the permit includes additional water quality-based effluent limitations, which, in combination with the technology-based effluent limits in Part III.A, the Department expects to be as stringent as necessary to achieve water quality standards. These additional WQBELs will apply in the permit where the Department has determined that discharges from construction sites may have the reasonable potential to cause or contribute to exceedances of applicable water quality standards, such as when a waterbody is impaired for sediment or nutrients, which are parameters associated with stormwater discharges from construction sites. The fact sheet discusses these additional requirements below for Part III.B.2.

Part III.B.2: Discharge Limitations for Sites Discharging to Sensitive Waters

Part III.B.2 addresses discharges to Tier II streams or watersheds.

Part III.B.2 Permit Requirements

This Part informs operators that for any portion of the site that discharges to a water that is identified by the Department or EPA as Tier II for antidegradation purposes, they must perform an antidegradation review (COMAR 26.08.02.04-1), which is accomplished by completing the antidegradation checklist in Appendix C. The checklist affirms that you will comply with the inspection frequency specified in III.C, the stabilization deadline specified in Part III.A.2.f, and the additional controls required when work is considered within Stream Protection Zones as specified in Part III.A.2.a and Appendix B. The antidegradation checklist includes verification of whether the stream has assimilative capacity or if any waivers were

allowed. Operators with discharges to Tier II streams with no assimilative capacity may be subject to additional review by the Department. In addition, on a case-by-case basis, the Department may notify operators of new sites or operators of existing sites with increased discharges that additional analyses, stormwater controls, or other measures are necessary to comply with the applicable antidegradation requirements, or notify you that an individual permit application is necessary.

Tiers 2 and 3 refer to waters either identified by the state as high-quality waters or Outstanding National Resource Waters under 40 CFR 131.12(a)(2) and (3). Maryland refers to Tier II vs Tier 2 found in the Federal Regulations. Maryland doesn't currently have any Tier III waters. For the purposes of this permit, you are considered to discharge to a Tier II water if the first Water of this State to which you discharge is identified by the Department or EPA as Tier II. For discharges that enter a storm sewer system prior to discharge, the Waters of this State to which you discharge is the first Waters of this State that receives the stormwater discharge from the storm sewer system. See the Maryland list of Tier II waters at https://mdewwp.page.link/Tier2Map.

The Department may determine on a case-by-case basis that a site discharges to a sensitive water.

The rationale for EPA's CGP more stringent requirements for Tier 2 designated waters was explained in the 2012 CGP fact sheet as follows:

> *"As stated in Part 3.1 of the [2012] CGP permit, in the absence of information demonstrating otherwise, EPA expects that compliance with the conditions in this permit will result in stormwater discharges being controlled as necessary to meet applicable water quality standards (which include state antidegradation requirements). More specifically, by imposing on operators that discharge to Tier 2, Tier 2.5, or Tier 3 waters the requirement to comply with the additional requirements, on top of the permit's other effluent limits and conditions, to stabilize exposed areas faster and to conduct more site inspections than other sites, It is EPA's judgment that authorizing these discharges will not result in a lowering of water quality. Thus, EPA has determined that compliance with the CGP generally will be sufficient to satisfy Tier 2 (or 2.5) and Tier 3 antidegradation requirements because the controls will not result in a lowering of water quality, making individualized Tier 2 or Tier 3 review unnecessary, assuming of course that the discharger is in compliance with any other applicable state or antidegradation conditions that are included in Part 9 of the permit. Furthermore, the controls in the permit are sufficiently stringent that they would generally satisfy the requirement at the heart of Tier 2 review, that the discharge is necessary to accommodate important economic or social development in the area where the discharge is located. Construction is usually important to economic and social development, and the controls already required in Part 2 of this permit have been identified by EPA in its effluent limitations guideline for the construction and development category as the level of pollutant abatement that is the best available technology economically achievable. However, in cases where information submitted with the NOI, or available from other sources, indicates that further review and/or conditions are necessary either for a new project or an existing project with a*

significantly increased discharge, EPA will conduct this review and require any appropriate additional controls."

The conclusion that compliance with the 20-CP (as with the EPA CGP) will generally meet the Tier II antidegradation requirements depends on several key aspects of the permit.

First, all construction sites that will be subject to this permit must meet the stringent general effluent limits set out in Part III.A. Through compliance with these limits alone, the Department expects that the discharge of pollutants will be reduced and/or eliminated so that there should not be a lowering of water quality. The Department looks to the EPA's experience in this regard in determining our basis. EPA bases this conclusion in part on the fact that the limits in this permit are based on the nationally-developed effluent limitations guidelines process that defined the BAT/BCT/BPT and NSPS level of control. EPA also is imposing on these sites the requirement to meet even more stringent controls defined in their permit for more frequent inspections and stricter stabilization deadlines, which now are reflected in the 20-CP. Maryland has added Stream Protection Zones with buffer requirements, as described previously in this Fact Sheet, in this version to include the State's longstanding 100 foot buffer requirement for these sensitive waters. Furthermore, once installed and implemented, the operator is obligated to maintain these controls and to correct deficiencies where an inspection determines that deficiencies exist. Where the Department determines through its oversight activities (e.g., onsite inspection) that a discharger is not meeting its limits, such a deficiency will constitute a violation of the permit and will require follow-up corrective action.

Second, there may very well be individual cases where the Department determines that further controls are necessary or that coverage under the 20-CP is no longer appropriate to protect the Tier II status of the receiving water. For this reason, the Department is using the EPA CGP language and has included the following language in Part III.B.2: "on a case-by-case basis, the Department may notify operators of such new sites or operators of existing sites with increased discharges that additional analyses, stormwater controls, or other permit conditions are necessary to comply with the applicable antidegradation requirements, or notify you that an individual permit application is necessary." It is anticipated that if the Department decides to require a Tier II review for a particular new project or an existing project with a significantly increased discharge, the Department may either change the terms of coverage or terminate 20-CP coverage and require an individual permit.

Part III.B.3: Discharge Limitations for Sites Discharging to Impaired Waters

For impaired waters, EPA's CGP requires more frequent inspections and more stringent deadlines for stabilization. When this was evaluated against Maryland's requirements, it is clear that Maryland's existing frequency of inspections and deadlines for stabilization for all sites is already as stringent as EPA's requirements for discharges to impaired waters. Therefore, there was no change required for these waters. However, if the operator discharges to a water that is impaired, the Department reserves the right to require additional controls as necessary for a discharge to be controlled as necessary to meet water quality standards, including for it to be consistent with the assumptions of any available wasteload allocation in any applicable TMDL, or if coverage under an individual permit is necessary.

Polychlorinated Biphenyls (PCB) Related Impairment Requirements:
The state is addressing PCB impairments related to construction in the same fashion that the EPA CGP does. Part III.B.3 includes a new requirement for operators discharging to waters impaired for polychlorinated biphenyls (PCBs) to implement controls to minimize the exposure of building materials containing polychlorinated biphenyls-(PCBs) to precipitation and stormwater during demolition of any structure with at least 10,000 square feet of floor space built or renovated before January 1, 1980. Buildings and structures originating or remodeled between the years of 1950-1979 often contain polychlorinated biphenyls (PCBs) in materials such as caulk and paint. Without proper controls, the demolition of such structures can cause PCBs to be released into the environment and discharged into Waters of This State during storm events. To address this concern, Part III.B.3 requires controls to be implemented to minimize exposure of building materials containing PCBs to precipitation and stormwater, and to ensure that such materials are disposed in compliance with applicable state, federal, and local laws. The requirement is limited to the demolition of buildings or structures with at least 10,000 square feet of floor space built or renovated before January 1, 1980 on sites that discharge to PCB-impaired waters. This requirement helps to ensure that authorized discharges will meet WQS.

Lacking any substantial research in Maryland, we looked to EPA and the CGP for direction on PCBs. The presence of PCBs in certain building components, especially in caulk and fluorescent light bulbs, has been a focus of EPA's research over the past several years. The following is a summary of the findings from EPA studies establishing the presence of PCBs in building materials, particularly in school buildings:

- Caulk put in place between 1950 and 1979 may contain as much as 40 percent PCBs and can emit PCBs into the surrounding air. PCBs from caulk may also contaminate adjacent materials such as masonry or wood.

- Fluorescent lighting fixtures that still contain their original PCB-containing light ballasts have exceeded their designed lifespan, and the chance for rupture and emitting PCBs is significant. Sudden rupture of PCB-containing light ballasts may result in exposure to the occupants and may also result in the addition of significant clean-up costs.

- Some building materials (e.g., paint and masonry walls) and indoor dust can absorb PCB emissions and become potential secondary sources for PCBs. When the primary PCB emitting sources are removed, the secondary sources often emit PCBs.

See EPA's webpage, Polychlorinated Biphenyls (PCBs) in Building Materials, located at https://www.epa.gov/pcbs/polychlorinated-biphenyls-pcbs-building-materials, for more information.

Releases of PCBs into the environment from building materials containing PCBs has also been well studied in certain regions of the country. In Washington State, stormwater was identified as the largest delivery pathway to surface waters for PCBs. Washington's "PCB Chemical Action Plan" identifies PCBs in caulk and paint as the second largest source of PCBs, accounting for 87

metric tons of PCBs in WA, with 160 kg/yr. released to the environment. (2015. PCB Chemical Action Plan. Washington State Department of Ecology. https://fortress.wa.gov/ecy/publications/SummaryPages/1507002.html). The Plan states that "Releases from building materials can be greatly accelerated during remodeling and demolition. There is an opportunity, through use of best management practices, to prevent releases of PCBs during remodeling and demolition."

Another Washington State Department of Ecology report, focusing on the Puget Sound Basin, (2011. Control of Toxic Chemicals in Puget Sound Phase 3: Primary Sources of Selected Toxic Chemicals and Quantities Released in the Puget Sound Basin. Ecology Publication No. 11-03-024. https://fortress.wa.gov/ecy/publications/documents/1103024.pdf) estimates 59 metric tons of PCBs are in building sealants in that area with about 110 kg released annually. This is likely an underestimate because the report did not consider all uses in buildings, e.g., windows, uses in residential buildings, or in other structures, such as bridges and sidewalks.

Building materials and caulk were also found to be potential sources of PCBs at both the Lower Duwamish Waterway (2011 Lower Duwamish Waterway Survey of Potential PCB-Containing Building Material Sources. Prepared for Ecology. https://fortress.wa.gov/ecy/gsp/DocViewer.ashx?did=41052) and Commencement Bay/Nearshore Tideflats Superfund sites in Washington State. The Rainier Commons building, currently a Toxic Substances Control Act (TSCA) cleanup site, was found to contain high concentrations of PCBs in caulk and paint that entered the stormwater system via catch basins on site. This system drains to the Lower Duwamish Waterway cleanup area. Elevated concentrations of PCBs in roadway caulk were found during source tracing by the City of Tacoma in response to the re- contamination of the Thea Foss Waterway in Commencement Bay. (2015. Thea Foss and Wheeler- Osgood Waterways 2014 Source Control and Water Year 2014 Stormwater Monitoring Report, City of Tacoma. Section 2.1.3. http://cms.cityoftacoma.org/enviro/SurfaceWater/SourceControlWYRpt/Report.pdf)

Releases of PCBs into the environment from PCB-containing building materials have also been well studied in the San Francisco Bay region. The San Francisco Bay Regional Water Quality Control Board found that "of the sources to the Bay, stormwater runoff contributes the greatest mass of PCBs." (2013. San Francisco Bay Regional Water Quality Control Board. San Francisco Bay PCBs TMDL – Implementation at Cleanup Sites. http://www.waterboards.ca.gov/sanfranciscobay/water_issues/programs/TMDLs/sfbaypcbs/SF%20Bay
%20 PCBs%20TMDL%20-
%20Considerations%20for%20Cleanup%20Sites%20September%205%202013.pdf). A study of buildings within greater San Francisco Bay region found PCBs in 88% of the caulk samples tested; 40% of the samples contained >50 ppm PCBs, and 20% > 10,000 ppm PCBs. Data suggest a correlation between PCB levels observed in the water with construction activity. Based on these studies, the San Francisco Bay Regional Water Quality Control Board stated that controlling demolition of buildings containing PCBs could significantly reduce the loading of PCBs in their stormwater.

The Department (similar to EPA focus) is purposefully limiting this new requirement to apply to sites that discharge to waters with known impairments for PCBs. Over 4,500 water bodies

nationally are currently listed in the PCB polluted category, making this the sixth-highest water pollution cause nationwide. (Summaries of Water Pollution Reporting Categories, ATTAINS parent cause category summaries, adapted from doc. no. EPA841-R-12-104, October 2012.) This includes 81,610 miles of rivers and streams, 3,204,534 acres of lakes and ponds, and 400,094 square miles of bays and estuaries that are impaired for PCBs. (National Causes of Impairment, Size of Assessed Waters with Listed Causes of Impairment, available at https://ofmpub.epa.gov/waters10/attains_nation_cy.control#causes). This includes Maryland Waters impaired for PCB in sediment. (https://mdewwp.page.link/MDIRMap) The Department does not currently have data on the number of construction projects subject to the 20-CP that may involve demolition of a structure with at least 10,000 square feet of floor space built or renovated before January 1, 1980 on sites that discharge to waters impaired for PCBs. In listening sessions with interested parties, there was confusion as to whether a construction SW (14-GP or 20-CP) permit is even required for demolition of structures that meet the criteria above. This condition will reinforce that permit coverage is required. However, it may be that erosion and sediment control plans are not always required. At this time, the Department does not have an estimate for the number of operators that will be affected by this requirement. However, the Department will be adding a new question on the NOI form asking about the prevalence of demolition of a structure with at least 10,000 square feet of floor space that was built or renovated before January 1, 1980.

There are a variety of controls that can be implemented to minimize the potential discharge of PCBs from demolition activities, and can also be effective in controlling the release of other hazardous substances like asbestos and lead-paint. The following examples provide guidance for operators in selecting the site-specific controls to meet this requirement in Part III.B. These examples are not required or exhaustive. Operators have flexibility in selecting the specific controls they will implement to meet this requirement in Part III.B, but must ensure that such controls minimize exposure of building materials to precipitation and stormwater, and ensure that such materials are properly disposed.
Operators must also document the selected controls in the SWPPP.

- Separate work areas from non-work areas and select appropriate personal protective equipment and tools.
- Construct a containment area so that all dust or debris generated by the work remains within the protected area.
    - Apply plastic sheeting to the floor, ground, or other applicable surfaces to prevent contamination of the building interior or exterior from dust generated by the work.
    - Put all necessary tools and supplies on the protective sheeting in the work area before you begin work to avoid stepping off the protective sheeting before the work is complete.
    - Construct a decontamination area outside of the work area by placing heavy plastic sheeting on the ground. Use this area for removing personal protective equipment and for cleaning equipment used in the enclosure.
        - ♣ Every time you leave the plastic sheeting, remove disposable shoe covers, and wipe or vacuum shoes, especially, the soles, before stepping off the plastic sheeting. A large disposable tack pad on the floor can help to clean the soles of shoes.

- ♣ Remove or vacuum off Tyvek suits when exiting the work area so the dust stays inside the work area.

- For locations where a containment area cannot be constructed, consider the following techniques:
    - Cover the ground and plants with heavy plastic sheeting to catch debris. The covering should extend at least ten feet out from the building. Secure the covering to the exterior wall with a wood strip and staples, or tape.
    - Seal off any vents or air exchange systems into the building that are located within the work area.
    - Move or cover any play areas within 20 feet of the work area. To prevent debris from falling beyond the ten-foot covering when working on the second story or above, extend the sheeting farther out from the base of the building and to each side of the area where materials are being disturbed.
    - To prevent the spread of debris when work is close to a sidewalk, street, or property boundary, or the building is more than three stories high, scaffolding sides should be covered in plastic.
    - Avoid working in high winds. Otherwise, take special precautions to keep the work area contained when the wind is strong enough to move dust and debris. For example, a wind screen can be constructed of plastic at the edge of the ground-cover plastic to keep dust and debris from migrating.
- For inside work, consider placing the containment area under negative air pressure and/or using high-efficiency particulate air (HEPA).
- Use tools that minimize dust and heat (<212° F). Detailed information on tools can be found at https://www3.epa.gov/epawaste/hazard/tsd/pcbs/pubs/caulk/guide/guideappendix.htm.
    - When using electromechanical tools, use HEPA vacuum attachments to contain the dust generated.
    - Use wet sanders and misters to keep down the dust created during sanding, drilling, and cutting.
- Leave the work area clean at the end of every day and at the end of the project.
    - Daily activities include:
        - ♣ Pick up as you go. Put trash in heavy-duty plastic bags.
        - ♣ Vacuum the work area with a HEPA vacuum cleaner frequently during the day and at the end of the day.
        - ♣ Clean tools at the end of the day.
        - ♣ Dispose of or clean off personal protective equipment.
        - ♣ Properly dispose of wastewater produced during the job.
    - End of project activities include:
        - ♣ Make sure all trash and debris, including building components, are disposed of properly.
        - ♣ Vacuum any exposed surfaces, including walls and ceilings, with a HEPA vacuum cleaner.
        - ♣ Mist dusty sections of the plastic sheeting with water before taking them down to keep dust from becoming airborne again.
        - ♣ Remove plastic sheeting carefully, fold it with the dirty side in, tape it

shut, and properly dispose of it.

♣ Visually inspect the site to ensure that no dust or debris is present and re-clean the area thoroughly if you find dust or debris.

- The following are also recommended practices for minimizing PCB exposure to workers, building occupants, and community members during demolition activities:
    - Use site security measures to prevent access of unauthorized persons to the work areas until after the final cleanup. Examples of security measures include:
        - Lock fence gates or doors to the work areas during off hours.
        - Place signs, barrier tape and/or cones to keep all non-workers out of the work area. Signs should be in the primary languages of the occupants, and should say "Do Not Enter - Authorized Personnel Only" and "No Eating, Drinking, or Smoking."
        - Establish a system to identify authorized persons and any limitations to their approved activities.
        - Provide a means for approving all visitors to the work area; ensure trained site personnel accompany visitors at all times and provide them with appropriate personal protective equipment.
    - Close windows and doors within 20 feet of the work area to keep dust and debris from getting into the building.
    - Change out of work clothing before going home, and launder non-disposable protective clothing separately from family laundry.

19. Part III.C: Site Inspection Requirements

Part III.C.1: Person(s) Responsible for Inspecting Site

Part III.C.1 clarifies that it is the operator who will be responsible for ensuring that the person who conducts inspections, whether he/she is a member of the project staff or a third party, must be a “qualified person.” In Maryland that means that the person conducting the inspection must hold a valid certificate of attendance from a training program for responsible personnel as required by Section 4- 104(b) of the Environment Article, unless the erosion and sediment control plan approval authority has waived the requirement for a Certificate of Training in accordance with Section 4-104(c) of the Environment Article.

Part III.C.1 Permit Requirements

Part III.C.1 clarifies that the person(s) inspecting the site may be a person on the project staff or a third party hired to conduct such inspections. Whoever will be charged with conducting the inspections must be a “qualified person,” who is knowledgeable in the principles and practice of erosion and sediment controls, and pollution prevention, who possesses the appropriate skills and training to assess conditions at the construction site that could impact stormwater quality, and the appropriate skills and training to assess the effectiveness of any stormwater control measures selected and installed to meet the requirements of the permit.

Part III.C.2: Frequency of Inspections

Part III.C.2 requires the operator to, at a minimum, conduct a site inspection in accordance with one of two schedules, unless they are subject to the Part III.C.3 site inspection frequency for discharges to sensitive waters or qualify for a Part III.C.4 reduction in the inspection frequency.

Part III.C.2 Permit Requirements

Part III.C.2 requires the operator to conduct inspections of the site and establishes the required minimum inspection frequency. The operator has the option to either (1) conduct a site inspection once every four (4) business days; or (2) conduct a site inspection once every 7 days and within 24 hours of the occurrence of a storm event.

This provision provides a new choice between the inspection frequencies, and includes 0.25 inches of rain over 24 hour as a rainfall event. In the past it was left open as a measurable storm event.

The one option remains largely unchanged, with the addition of defining what a storm event is (0.25 inches of rain in 24 hours). This allows operators to conduct their inspection within 24 hours of the conclusion of a storm event. In the Department's judgment, it is important for inspections to be conducted within a day of the occurrence of a rainfall event so that the operator could catch any potential problems on the site and correct such problems before a prolonged discharge of pollutants occurs.
Requiring inspections to be conducted within 24 hours of the occurrence of a qualifying storm event provides assurance that, during multiple days of discharge from a single storm event, problems with the control of pollutants will be identified sooner and corrected in accordance with the corrective action timeframes specified in Part III.D of the permit.

The new option to inspect every four business days is more frequent than contemplated in the existing weekly inspection. This option is consistent with EPA, as well as neighboring states, where more frequent inspections is an option. By scheduling inspections every 4 business days, there are several benefits to water quality. Problems with controls may be found ahead of a storm event, especially if it hasn't rained during the week. It is also more effective for the operators to schedule the contractor or responsible person on a regular schedule, easier for an MDE inspector to verify compliance and more efficient to get work done as a result. For these reasons, it was important for the State to consider the option. It is the Department's position that this is an effective option.

Part III.C.3: Increase in Inspection Frequency for Sites Discharging to Sensitive Waters

Part III.C.3 This requirement is new to the General Permit and requires increased inspection frequencies for the portion of any sites discharging to a water identified by the Department or EPA as Tier II for antidegradation purposes.

Part III.C.3 Permit Requirements

The operator must conduct inspections in accordance with the following inspection frequencies: Once every 4 calendar days and when possible within 24 hours of a storm event

of 0.25 inches or greater, or the occurrence of runoff from snowmelt sufficient to cause a discharge. To determine if a storm event of 0.25 inches or greater over the course of 24 hours has occurred on your site, the operator must either keep a properly maintained rain gauge on the site, or obtain the storm event information from a weather station that is representative of its location. For any day of rainfall during normal business hours that measures 0.25 inches or greater, the operator must keep a record of rainfall occurrences in accordance with Part III.C.7.f.

As noted in the fact sheet section on Part III.B, it is the Department's judgment that these inspection requirements will enhance the operator's ability to find and correct problems before a discharge of pollutants occurs. The Department expects that compliance with the water quality-based effluent limits in the permit, in combination with the general effluent limits in Part III.A, will result in discharges that meet applicable water quality standards. The Department clarifies that the more frequent site inspections are required only for those portions of the site that are discharging to the sensitive water. For example, for a highway construction project spanning many miles over multiple watersheds, the increase in inspection frequency would only be required in areas of the site that discharge to or within one mile upstream of the sensitive water. The Department also notes that if the operator qualifies for the reduced inspection frequency specified in Part III.C.4, they may comply with that reduced frequency despite the fact that they discharge to a sensitive water. This is because the reduced frequencies in Part III.C.4 apply only to situations where the reduced inspection frequency is justified by circumstances that ensure protection of all waters, including sensitive waters.

Part III.C.4: Reductions in Inspection Frequency

Part III.C.4 identifies that a reduction in the frequency of inspections is allowed in any areas of the site that have achieved temporary or final stabilization as required in Part III.A.2.f. The permit enables the operator to reduce the frequency of inspections to once per month in any area of the site where the stabilization steps in Part III.A.2.f have been completed. If construction activity resumes in this portion of the site at a later date, the inspection frequency immediately increases to the frequency specified in Part III.C.2 or III.C.3 if applicable. The operator must document the beginning and ending date of this period in its SWPPP.

Areas of the site that have achieved temporary or final stabilization present a significantly lower risk of producing unacceptable discharges of pollutants in stormwater to surface waters. It is the Department's judgment that the reduction in inspection frequency will provide a benefit in reduced administrative burden to the operator.

Part III.C.5: Areas That Must Be Inspected

Part III.C.5 describes the areas on the site that must be inspected (III.C.5.a – III.C.5.f).

Permit Requirements. The permit specifies which areas of the site must be inspected during each site inspection, which include, at a minimum, the following:

III.C.5.a. All areas that have been cleared, graded, or excavated, and that have not yet completed stabilization consistent with Part 2.2.14.a;
III.C.5.b. All stormwater controls (including pollution prevention controls) installed at the site to comply with this permit;
III.C.5.c. Material, waste, borrow or equipment storage and maintenance areas that are covered by this permit;
III.C.5.d. All areas where stormwater typically flows within the site, including drainageways designed to divert, convey, and/or treat stormwater;
III.C.5.e. All points of discharge from the site; and
III.C.5.f. All locations where stabilization measures have implemented.

Operators are not required to inspect areas of the site that, at the time of the inspection, are considered unsafe to inspection personnel.

The 14-GP didn't contain a list equivalent to this; however, it did specify the use of a check list provided by MDE. By including requirements in the permit, MDE can allow for alternative checklists that meet these requirements. The requirements added are the ones required by the EPA CGP and are consistent with MDE's own checklist and methodology.

Part III.C.6: Requirements for Inspections

Part III.C.6 includes specific requirements regarding the focus of the

inspection. Part III.C.6 (III.C.6.a – III.C.6.g) Permit Requirements

The permit requires that inspections, at a minimum, consist of the following:

III.C.6.a. Check whether all stormwater controls (i.e., erosion and sediment controls and pollution prevention controls) are properly installed, appear to be operational, and are working as intended to minimize pollutant discharges.

III.C.6.b. Check for the presence of conditions that could lead to spills, leaks, or other accumulations of pollutants on the site;

III.C.6.c. Identify any locations where new or modified stormwater controls are necessary to meet the requirements of Parts III.A and/or III.B;

III.C.6.d. Check for signs of visible erosion and sedimentation (i.e., sediment deposits) that have occurred and are attributable to the discharge at points of discharge and, if applicable, the banks of any Waters of This State flowing within or immediately adjacent to the site;

III.C.6.e. Identify any incidents of noncompliance observed.

III.C.6.f. If a discharge is occurring during the inspection, the operators must:

i. Identify all points at the site; and
ii. Observe and document the visual quality of the discharge, and take note of the characteristics of the stormwater discharge, including color; odor; floating, settled, or

suspended solids; foam; oil sheen; and other indicators of stormwater pollutants.

III.C.6.g. Based on the results of the inspection, complete any necessary maintenance under Part III.A.1.d and corrective actions under Part III.D.

Part III.C.7: Inspection Report Part

Part III.C.7 Consistent with the Department's inspection report form, the listing of the requirements provides a consistent means of documenting the results of each inspection in cases where alternative reports are requested or desirable.

Part III.C.7 Permit Requirements
The operator must complete an inspection report within 24 hours of completing any site inspection. Each inspection report must include the following:

a. the date and time of the inspection;
b. the name(s) of the individual(s) who performed the inspection;
c. Weather information (current conditions as well as time and amount of last recorded precipitation).
d. A summary of your inspection findings, covering at a minimum the observations you made in accordance with Part III.C.6, including any necessary maintenance or corrective actions; (such as whether significant amounts of sediment were observed as described in Part III.C.6.d, Prevention of the Discharge of Significant Amounts of Sediment, above; an assessment of the condition of erosion and sediment controls and how any deficiencies were or are being addressed; and a description and date of any erosion and sediment control implementation and maintenance performed, including identification of any controls that have not been installed as required)
e. A description of the site's present phase of construction;
f. If you are inspecting your site at the frequency specified in Part III.C.3 (discharges to Sensitive Waters), and you conducted an inspection because of rainfall measuring 0.25 inches or greater in a 24 hour period, you must include the applicable rain gauge or weather station readings that triggered the inspection; and
g. If you determined that it is unsafe to inspect a portion of your site, you must describe the reason you found it to be unsafe and specify the locations to which this condition applies.

Part III.C.8: Recordkeeping Requirements

Part III.C.8.a. The Requirement to Post a Notice of Your Permit Coverage is to provide notice to the public, and any other interested parties that discharge from the construction site are authorized by the Department. By providing notice of permit coverage and other information about the site, interested parties are more easily able to obtain information about the construction site, such as the SWPPP, and identify the site when reporting potential permit violations. Note that operators are only required to provide copies of the SWPPP, upon request, to the representatives from the Department, EPA, local agency approving stormwater management plans; or the operator of a storm sewer system receiving discharges from the site. The Department may provide access to portions of the SWPPP to a member of the public upon request.

Part III.C.8.b. This Part requires inspection reports be kept at the site and available to inspectors. The permit requires that the operators keep a copy of all inspection reports at the site or at an easily accessible location, so that they are available at the time of an on-site inspection or upon request by representatives from the Department or EPA.

Part III.C.8.c: Record Retention. This requirement is to retain all reports a minimum of three years comes from the standard permit condition requirements at 40 CFR 122.41(j)(2).

Part III.C.8.d. When a permit is transferred, the original permittee must maintain the records in Part III.C.8.b above that document the permit activity up to the date of transfer. The original permittee must maintain those records for three (3) years from the date of transfer. Both the original permittee and the new permittee must maintain a copy of the Transfer of Authorization document.

Part III.C.8.e. The permittee shall ensure that samples and measurements taken for the purpose of monitoring are representative of the monitored activity. If the director requires monitoring at a site covered by this permit, the permittee shall use monitoring procedures that are sufficiently sensitive to meet an imposed limit, in accordance with federal regulations at 40 CFR 122.44(i)(1)(iv). Records of monitoring information must include:

i. the date, exact place, and time of sampling or measurements;
ii. the individual(s) who performed the sampling or measurements;
iii. the date(s) analyses were performed;
iv. the individual(s) who performed the analyses;
v. the analytical techniques or methods used;
vi. the results of such analyses; and
vii. all calibration and maintenance records and all original strip chart recordings for continuous monitoring instrumentation.

Part III.C.8.f. Reporting Requirements. The permittee shall submit, upon request by MDE, the information maintained in accordance with Part III.C.8 to the Compliance Program.

20. Part III.D: Corrective Actions

The title of this section (formally IV.B) has changed from “Prevention of the Discharge of Significant Amounts of Sediment” to “Corrective Actions”. This was to make it easier to find the section, which is cross referenced throughout the permit. The requirements were compared with the EPA CGP, and when conditions that related to high quality waters or other new permits, addressed with additional language from the EPA CGP. Most however remains the same as the 14-GP.

Part III.D: Conditions Triggering Corrective Action

Part III.D explains when an operator is expected to take corrective action. Part III.D (III.D.1.a – III.D.1.e) Permit Requirements

Part III.D.1 defines the conditions under which an operator must take corrective action at their site:

III.D.1.a. A stormwater control needs repair or replacement (beyond routine maintenance required under Part III.A.1.d); or

III.D.1.b. A stormwater control necessary to comply with the requirements of this permit was never installed, or was installed incorrectly; or

III.D.1.c. The operator's discharges are causing an exceedance of applicable water quality standards; or

III.D.1.d. A prohibited discharge has occurred (see Part I.D) ; or

III.D.1.e. There are indications of significant amounts of sediment discharging such as:

i. Earth slides or mud flows;
ii. Concentrated flows of stormwater such as rills, rivulets or channels that cause erosion when such flows are not filtered, settled or otherwise treated to remove sediment;
iii. Turbid flows of stormwater that are not filtered, settled or otherwise treated to reduce turbidity;
iv. Deposits of sediment at the construction site in areas that drain to unprotected stormwater inlets or catch basins that discharge directly to surface waters;
v. Deposits of sediment from the construction site on public or private streets outside of the permitted construction activity;
vi. Deposits of sediment from the construction site on any adjacent property outside of the permitted construction activity; or
vii. Discharges from the construction site to municipal conveyances, curbs and gutters, or streams running through or along the site where visual observations show that the discharges differ from ambient conditions in terms of turbidity so as to indicate significant amounts of sediment present in them.

The conditions in III.D.1.e that require corrective action are substantively similar to and consistent with those from Part IV.B of the 14-GP. The others (a-d) are from EPA's CGP and are consistent with Corrective Actions in other General Permits issued by the Department. This includes the recently added EPA triggering condition for corrective action if a stormwater control needs repair or replacement (Part III.D.1.a).

Part III.D.2: Corrective Action Deadlines

Part III.D.2 These deadlines remain the same as in the previous permit (Part IV.B.2 combined with Part
IV.B.3 with the addition of SWPPP documents to be reviewed). It establishes deadlines for initiating and completing work to correct the conditions identified at the site in accordance with Part III.D.1. Corrective action is distinguished from routine maintenance of stormwater controls and pollution prevention measures required in Parts III.A.1.d and III.A.3.

Part III.D.2 Permit Requirements

Language from Part III.B.2 “the permittee must undertake the following actions and record the dates and results of these actions in an onsite logbook”.

a. Within one day the permittee shall inspect erosion and sediment control practices to verify compliance with its approved Plans. Any deficiencies, including, but not limited to, failure to follow the approved sequence of construction, failure to maintain approved buffers, grading beyond the limit of disturbance, or any approved sediment and erosion controls found to be missing, improperly installed or in need of maintenance must be corrected immediately and may be considered to be a violation of this permit until such time that they are corrected.

b. If the site is found to be in compliance with its approved Plans, the permittee shall, by the next business day, contact the Compliance Program of the Water and Science Administration in MDE, the enforcement authority for the site (if it is not MDE), and the appropriate approval authority for Erosion and Sediment Control and inform the authorities about the conditions observed during the inspection cited above. In addition to any requirements imposed by the delegated enforcement authority or MDE, the permittee shall, after notifying the enforcement authority, implement any of the following that are determined to be appropriate towards the prevention of further triggering events:

i. Any change that may be approved in the field by the inspector for the enforcement authority for the site;
ii. Modifications to the Plans allowed as field modifications by the approval authority;
iii. Performing temporary or permanent seeding of disturbed areas more frequently than required by the approved Plan or regulation; or
iv. Increasing buffer distances.

The permittee shall implement any changes needed based on the above review within four days after the triggering event is observed.

”Language from (Part IV.B.3 with the addition of SWPPP documents to be reviewed) “If additional triggering events are observed, the permittee shall, through its site engineer, determine if the Erosion and Sediment Control Plan and Stormwater Management Plan are adequate, if an update to a SWPPP is required or whether additional on-site practices or plan modifications are required. Within three days of the second observation of a triggering event, the permittee shall contact the Compliance Program of the Water and Science Administration in MDE, the enforcement authority for the site (if it is not MDE), and the approval authority for the Plans and advise them that:

a. The permittee observed a triggering event;
b. The event happened despite the fact that erosion and sediment controls were properly installed and maintained; and
c. The permittee is reviewing plans and will afford the approval authority the opportunity to concurrently review them.

The permittee’s review of plans shall begin within three days of the triggering event. The permittee must submit revised plans to the approval authority no later than 14 days after the second observation of a triggering event. The permittee must obtain approval of the revised

Plans from the approval authority and begin implementation of the changes immediately upon approval."

Part III.D.3: Corrective Action Report

The 14-GP had a section labeled "Part IV.B.3 Corrective Action Required and Corrective Action Report", however had no corrective action report requirements. That section was combined with the III.D.2: Corrective Action Deadlines, since the language was actually made up of various actions with deadlines. The section now contains only requirements for a Corrective Action Report. Since these were not included in the previous permit, these are new requirements for proper documentation of all corrective actions that must be taken under this part of the permit (as identified by the EPA CGP).

Part III.D.3 Permit Requirements

Part III.D.3 requires that operators complete a corrective action report for each corrective action taken in accordance with this part of the permit.

This requirement is similar to the EPA CGP.

Part III.D.3.a requires the operator to immediately record some basic information with respect to the initial finding of the triggering condition.

Part III.D.3.a Permit Requirements

Within 24 hours of identifying the corrective action condition, the operator must document the specific condition and the date and time it was identified.

Part III.D.3.b requires the operator to document the completion of corrective actions that were identified in Part III.D.2.

Part III.D.3.b Permit Requirements

Within 24 hours of completing the corrective action (in accordance with the deadlines in Part III.D.2), the operator must document the actions taken to address the condition, including whether any SWPPP modifications are required.

Part III.D.3.c establishes requirements for accountable documentation of compliance with the corrective action requirements in this permit. Part II.A.8 provides signature requirements for reports.

Part III.D.3.c Permit Requirements

Each corrective action report must be signed in accordance with Part II.A.7 of this permit. The requirement in III.D.3.d is intended to ensure that the Department officials have immediate access to such records during an on-site inspection.

Part III.D.3.d Permit Requirements

The operator must keep a copy of all corrective action reports at the site or at an easily accessible location, so that it can be made available at the time of an on-site inspection or upon request by the Department.

The requirement in Part III.D.3.e to retain all reports a minimum of 3 years comes from the standard permit condition requirements at 40 CFR 122.41(j)(2).

Part III.D.3.e Permit Requirements

The operator must keep all corrective action reports completed for this Part for at least three (3) years from the date that permit coverage expires or is terminated.

21. Part III.E: Staff Training Requirements

The staff training requirements in Part III.E are to ensure that each member of the stormwater team understands the requirements of the permit and his or her particular responsibilities relating to complying with those requirements. This section has been expanded to address situations where a SWPPP is now implemented. The 14-GP stated very succinctly Part III.D "The permittee must ensure that responsible personnel holding a valid certificate of attendance at training program in accordance with Environment Article § 4-104 are on site as required by the approved Erosion and Sediment Control Plan. The permittee must ensure that all site personnel are trained to understand aspects of permit and plan compliance relevant to their specific duties, including but not limited to BMP installation/maintenance and preventing and reporting spills and damaged BMPs." So the 14-GP was specific to the E&SC plan. The 20-CP contains requirements for the staff training, and includes which staff need training, and that they need access to documentation. This addition is consistent with the EPA CGP, which also deals with training for SWPPP related activities.

Part III.E Permit Requirements

Part III.E requires the operator, or group of multiple operators, to assemble a "stormwater team" to carry out compliance activities associated with the requirements in the permit. The requirements to conduct training prior to commencing construction activities will not apply to emergency-related construction activities that are eligible for permit coverage under Part II; however, for such activities, training must be conducted prior to NOI submission.

III.E.1 Prior to the commencement of construction activities, the operator must ensure that the following members of the stormwater team receive training to ensure that they understand the permit requirements and their specific responsibilities with respect to those requirements:

a. Personnel who are responsible for the design, installation, maintenance, and/or repair of stormwater controls (including pollution prevention controls);

b. Personnel responsible for the application and storage of treatment chemicals (if applicable);

c. Personnel who are responsible for conducting inspections as required in Part 4.1; and

d. Personnel who are responsible for taking corrective actions as required in Part 5.

Part III.E.2 specifies that the operator is ultimately responsible for ensuring that all activities on the site comply with the requirements of the permit. The operator is not required to provide or document formal training for subcontractors or other outside service providers, but must ensure that such personnel understand any requirements of the permit that may be affected by the work they are subcontracted to perform.

Part III.E.3 specifies that the content and extent of training must be tailored to match the stormwater team member's duties and responsibilities related to the permit's requirements. At a minimum, personnel must be trained to understand the following if related to the scope of their job duties (e.g.,
only personnel responsible for conducting inspections need to understand how to conduct inspections):

a. The permit deadlines associated with installation, maintenance, and removal of stormwater controls and with stabilization;

b. The location of all stormwater controls on the site required by this permit and how they are to be maintained;

c. The proper procedures to follow with respect to the permit's pollution prevention requirements; and

d. When and how to conduct inspections, record applicable findings, and take corrective actions.

III.E.4 Each member of the stormwater team must have easy access to an electronic or paper copy of applicable portions of this permit, the most updated copy of the operator's SWPPP, and other relevant documents or information that must be kept with the SWPPP.

Part III.E also specifies the minimum understanding that applicable members of the stormwater team should have with respect to the pertinent aspects of permit compliance. All of the above listed areas that must be understood by stormwater team members relate to specific permit provisions in the 20- CP.

If the person requiring training is a new employee who starts after commencement of construction activities, the operator must ensure that this person has the proper understanding as required above prior to assuming particular responsibilities related to compliance with this permit. New training may not be necessary for some employees if the operator is able to ensure that the employee, due to prior training, already understands the applicable topic area.

The Department also notes that for emergency-related projects, the requirement to train personnel prior to commencement of earth-disturbing activities does not apply. Because immediate authorization is available for these projects, given the urgency of the timing associated with such projects, it is the Department's judgment that it is appropriate to provide greater flexibility in the initial weeks of construction. However, the permit requires that upon submittal of the NOI, personnel be trained in accordance with this section.

22. Part III.F: Stormwater Pollution Prevention Plan (SWPPP)

This entire section is new to the State's General Permit. The State has a long standing process and regulatory framework for creation of E&SC plans which only address sediment and nutrient pollution; however, this new requirement is meant to address other potential pollutants often found at construction sites that are not addressed under that framework.

Part III.F describes the requirements for developing and maintaining a SWPPP. It follows the EPA CGP general structure of what to include in the SWPPP, when the permittee is required to create one. Using this established framework will allow the State to make use of Templates developed by EPA, to use Guides provided by EPA, and MDE is being substantively similar to other states that use the EPA CGP as a model permit. For those permittees that do business in other States, it provides an understandable framework, and for those in the State, it provides a proven basis. Furthermore, the SWPPP requirement is only applicable to certain conditions, which are: a. Use Chemical Additives for Sediment Control, b. Have potential for any of the non-stormwater discharges prohibited above (whether the site is known to be contaminated by PCBs, PFAS, mercury, lead, or other metals, or any other source of toxic industrial pollution) c. Have activities requiring the pollution prevention measures referenced in Part III.A.3, or d. Are sharing liability between and among operators on the same site.

Part III.F.1: General Requirements

Part III.F.1 establishes the overall requirement that operators develop SWPPPs prior to submitting their NOIs, when they are required to have a SWPPP (a. Use Chemical Additives for Sediment Control, b. Have potential for any of the non-stormwater discharges prohibited above (whether the site is known to be contaminated by PCBs, PFAS, mercury, lead, or other metals, or any other source of toxic industrial pollution) c. Have activities referenced in Part III.A.3,or d. Are sharing liability between and among operators on the same site.). The SWPPP must be in place prior to discharging so that the appropriate erosion and sediment controls are selected and to ensure that the eligibility and other requirements under the permit will be met.

Part III.F.1 Permit Requirements

The SWPPP is intended to serve as a road map for how the construction operator will comply with the effluent limits and other conditions of this permit. The language in this Part "The SWPPP does not establish the effluent limits that apply to your site's discharges; these limits are established in this permit in Parts III.A and III.B." clarifies that the SWPPP does not establish the effluent limits that apply to the construction site's discharges; these limits are established in the permit. This is consistent with the EPA, when they emphasize that while the requirement to develop a SWPPP, to keep it updated, and to include in it all of the required minimum contents consistent with Part III.F.2 are enforceable permit requirements, the site-specific details of these SWPPPs do not establish separately enforceable limits, terms, or conditions of the permit. The fact that the SWPPP is an external tool and not considered to include effluent limits enables the operator to be able to modify and retool its approach during the course of the permit term in order to continually improve how it complies with the permit.

The new language in this Part also provides that where there are multiple operators associated

with the same site, they may develop a group SWPPP instead of multiple individual SWPPPs. For instance, if both the owner and the general contractor of the construction site meet the definition of an operator and must obtain NPDES permit coverage, either party could develop a group SWPPP that applies to both parties, as long as the SWPPP addresses both parties' permit-related functions. Another example is where there are multiple operators associated with the same site through a common plan of development or sale (such as a housing development) at which a shared control exists. In this scenario, the operators may develop a group SWPPP instead of multiple individual SWPPPs, and divide amongst themselves various permit-related functions provided that each SWPPP, or a group SWPPP, documents which operator will perform each permit-related function, including those related to the installation and maintenance of the shared control. Regardless of whether there is a group SWPPP or multiple individual SWPPPs, all operators are legally responsible for compliance with the permit. In other words, if Operator A relies on Operator B to satisfy its permit obligations, Operator A does not have to duplicate those permit-related functions if Operator B is implementing them for both operators to be in compliance with the permit. However, Operator A remains responsible for permit compliance if Operator B fails to implement any measures necessary for Operator A to comply with the permit.

In addition, all operators must ensure, either directly or through coordination with other operators, that their activities do not compromise any other operators' controls and/or any shared controls.

Part III.F.2: SWPPP Contents

Part III.F.2 includes the minimum requirements that must be included in the SWPPP, as follows.

Part III.F.2.a: All Site Operators

Part III.F.2.a provides information about other operators engaged in activities covered under the permit. Part III.F.2.a Permit Requirements
Part III.F.2.a requires that the SWPPP contain a list of all other operators who will be engaged in construction activities at the site, and the areas of the site over which each operator has control. For construction sites with only one operator, this provision does not apply.

Part III.F.2.b: Stormwater Team

The requirement in Part III.F.2.b to provide information about the Stormwater Team in the SWPPP provides assurance that specific staff members are identified as responsible for overseeing the development of the SWPPP and are responsible for ensuring compliance with the permit requirements. Identification of staff members on the stormwater team in the SWPPP provides notice and clarification to facility staff and management (e.g., those responsible for signing and certifying the plan) of the
responsibilities of certain key staff for following through on compliance with the permit's conditions and limits.

Part III.F.2.b Permit Requirements

Part III.F.2.b requires the operator to identify the personnel (by name or position) that are part of the stormwater team, as well as their individual responsibilities, including which members are responsible for conducting inspections. This requirement is also a logical extension of the need for the operator to designate personnel (whether or not they are members of the operator's staff or a subcontractor's) that are assigned the responsibility of carrying out the permit's requirements related to preparing the SWPPP, installing and maintaining stormwater control measures, conducting inspections, taking samples (if required), and implementing corrective actions.

Part III.F.2.c: Nature of Construction Activities

The provision in Part III.F.2.c requiring a description of the nature of the construction activities taking place on the construction site provides general information about the construction project, which can be readily understood by an MDE inspector or other third party who may be unfamiliar with the purpose and general layout of the projects.

Part III.F.2.c Permit Requirements

Part III.F.2.c requires that the SWPPP describe the nature of the construction activities, including:

i. A description of the nature of your construction activities, including the age or dates of past renovations for structures that are undergoing demolition;
ii. The size of the property (in acres or length in miles if a linear construction site);
iii. The total area expected to be disturbed by the construction activities (to the nearest quarter acre or nearest quarter mile if a linear construction site);
iv. A description of any on-site and off-site construction support activity areas covered by this permit (see Part I.C.1.c);
v. The maximum area expected to be disturbed at any one time, including on-site and off-site construction support activity areas;
vi. A description and projected schedule for the following:
    - Commencement of construction activities in each portion of the site, including clearing and grubbing, mass grading, demolition activities, site preparation (i.e., excavating, cutting and filling), final grading, and creation of soil and vegetation stockpiles requiring stabilization;
    - Temporary or permanent cessation of construction activities in each portion of the site;
    - Temporary or final stabilization of exposed areas for each portion of the site; and
    - Removal of temporary stormwater controls and construction equipment or vehicles, and the cessation of construction-related pollutant-generating activities.
vii. A list and description of all pollutant-generating activities (e.g., paving operations; concrete, paint, and stucco washout and waste disposal; solid waste storage and disposal; and dewatering operations) on the site. For each pollutant-generating activity, include an inventory of pollutants or pollutant constituents (e.g., sediment, fertilizers, pesticides, paints, caulks, sealants, fluorescent light ballasts, contaminated substrates, solvents, fuels) associated with that activity, which could be discharged in stormwater from your

construction site. You must take into account where potential spills and leaks could occur that contribute pollutants to stormwater discharges, and any known hazardous or toxic substances, such as PCBs and asbestos, that will be disturbed or removed during construction;

viii. Business days and hours for the project;

ix. If you are conducting construction activities in response to a public emergency (see Part I.F.1), a description of the cause of the public emergency (e.g., mud slides, earthquake, extreme flooding conditions, widespread disruption in essential public services), information substantiating its occurrence (e.g., state disaster declaration or similar state or local declaration), and a description of the construction necessary to reestablish affected public services.

Operators must describe the "age and/or dates of past renovation for structures that are undergoing demolition" to document any relevant information related to the provision in Part III.B.3 on implementing pollution prevention controls to minimize the exposure of polychlorinated biphenyl-(PCB) containing building materials for demolition of any structure built or renovated before January 1, 1980.

Identification of the size of the property, total area expected to be disturbed by construction activities, description of construction support activities, and the area expected to be disturbed provides the operator, among other things, with information about properly designing and installing stormwater control measures to minimize the discharge of pollutants, as well as information about the placement and type of stabilization practices that should be implemented to minimize the discharge of pollutants in stormwater.

This Part also requires the schedule for activities such as commencement of construction, temporary or permanent cessation of construction, temporary or final stabilization, and removal of controls.
Operators include a site phasing plan as part of the schedule for activities. The purpose of requiring documentation of the sequencing of construction activities is to assist operators with planning their construction activity sequencing in conjunction with the control measures they intend to use to meet the effluent limitations in this permit. Proper construction site planning limits the amount of land disturbed at one time and limits the exposure of unprotected soils through rapid stabilization, which in turn reduces the amount of sediment that gets discharged from the construction site. This requirement provides operators a better understanding of the site runoff characteristics throughout all phases of construction activity, which will help them to plan for the types of stormwater control measures necessary to meet effluent limitations. It is the Department's judgment that documenting this schedule of activities will help operators to minimize earth disturbances to the extent necessary for the construction activity, which will also minimize pollutants discharged in stormwater. If plans change due to unforeseen circumstances or for other reasons, the requirement to describe the sequence and estimated dates of construction activities is not meant to "lock in" the operator to meeting these dates. When departures from initial projections are necessary, this should be documented in the SWPPP itself, or in associated records, as appropriate.

The Department also clarifies that in the description of each pollutant-generating activity,

operators must list any known hazardous or toxic substances, such as PCBs and asbestos, which will be disturbed or removed during construction. Operators must also document the business days and hours for the project so that Department, or any authorized representative, can be informed of normal operating hours in the instance of an inspection.

Part III.F.2.d: Site Map

Part III.F.2.d requires that the SWPPP contain a legible site map, or series of maps. It is possible to use a Map from the approved E&SC, and include written information over it. The requirements in Part III.F.2.d.i and III.F.2.d.ii provide a visual depiction of where construction activities are occurring in relation to the boundaries of the property.

Part III.F.2.d.i - ii Permit Requirements for the site map include:

i. Boundaries of the property. The map(s) in the SWPPP must show the overall boundaries of the property.

ii. Locations where construction activities will occur. The map(s) in the SWPPP must show the locations where construction activities will occur, including:

- Locations where earth-disturbing activities will occur (note any phasing), including any demolition activities;
- Approximate slopes before and after major grading activities (note any steep slopes (as defined in Appendix A));
- Locations where sediment, soil, or other construction materials will be stockpiled;
- Any Waters of This State crossings;
- Designated points where vehicles will exit onto paved roads;
- Locations of structures and other impervious surfaces upon completion of construction; and
- Locations of on-site and off-site construction support activity areas covered by the permit (see Part I.C.1.c).

Consistent with EPA, the Department includes the areas of demolition activities on the site map.

The requirement in Part III.F.2.d.iii compels operators to develop an understanding of the location of any waters flowing through or near the property where the construction will take place.

Part III.F.2.d.iii Permit Requirements

iii. Locations of all Waters of This State within and one mile downstream of the site's discharge point. Also identify if any are listed as impaired, or are identified as a Tier II water.

Requiring a visual showing these waters will provide operators with information necessary to comply with the requirements for impaired waters (Parts III.B.1), and Tier II protected waters (Part III.B.2). Identifying the location of these waters on the site map will also help operators comply with the Erosion and Sediment Control requirements (Part III.A.2),

particularly those related to buffers (Part III.A.2.a), and Pollution Prevention Standards (Part III.A.3).

Part III.F.2.d.iv requires documentation on the site map of areas of threatened or endangered species critical habitat. This requirement is consistent with Part III.B.3 from the 14-GP.

The requirement in Part III.F.2.d.v to map pre-construction cover on the site will assist operators in understanding how stormwater moves onto, through, and from the property prior to construction, and how any changes in this cover due to construction activities may affect the flow of stormwater.

The requirement in III.F.2.d.vi to map the flow of stormwater on the site will provide valuable information to assist with planning, designing, and installing the appropriate stormwater control measures necessary to meet the permit's requirements regarding erosion and sediment controls,
pollution prevention, and stabilization. Specifically it will also assist the operator with complying with the requirements in Part III.A.2.g to "Direct stormwater to vegetated areas."

The requirements in Part III.F.2.d.vii informs the operator and, for the Department's purposes, documents where both non-stormwater and stormwater discharges will occur.

There are multiple uses for the information required in Part III.F.2.d.vii, among which include: (1) learning where sewer inlet protections will need to be installed prior to commencing construction disturbances; and (2) helping to plan stormwater controls that will reduce the erosive force of the discharge. The permit notes that the requirement to show storm drain inlets in the immediate vicinity of the site only applies to those inlets that are easily identifiable from the site or from a publicly accessible area immediately adjacent to the site.

The requirement in Part III.F.2.d.viii to identify the locations of all pollutant-generating activities on the site map will provide operators with an understanding of how the location of their various pollutant- generating activities will correspond to the areas of disturbance at the site, the potential impacts of where these activities are located on the discharge pollutants, and the ideal locations for stormwater control measures to reduce or eliminate such discharges. This information will be used to comply with the pollution prevention requirements in Part III.A.3.

The requirement in Part III.F.2.d.ix to show on the site map the location of stormwater control measures is intended to provide a spatial correlation between pollutant sources on the site, the flow of stormwater through and from the site, and the location of Waters of This State. Locations of stormwater controls, including natural buffer areas and any shared controls utilized to comply with this permit. The permit requires identification on the site map of the location of stormwater control measures.

It is the Department's judgment that by requiring such information on the site map (or the

E&SC Plan drawing), the operator will be better able to locate stormwater control measures strategically so as to comply with the permit's requirements for erosion and sediment and pollution prevention in Parts III.A.2 and III.A.3. The requirement to show on the site map where areas of exposed soil will be stabilized, or have already been stabilized, provides operators with a visual aid that will help them to comply with the temporary and final stabilization requirements in Part III.A.2.f. The requirement to document natural buffer areas is included to help operators implement Part III.A.2.a to "Provide and maintain natural buffers."

The requirement in Part III.F.2.d.x to show where chemicals will be applied on the site, and where they will be stored, is included to help operators implement Part III.A.2.m (treatment chemicals) and Part III.A.3.c (storage, handling and disposal of building products, materials, and waste). This requirement encourages the operator to think strategically about where the chemicals are applied and stored to minimize the risk of accidental release.

Part III.F.2.e: Non-Stormwater Discharges

Part III.F.2.e requires operators to create a comprehensive list of all non-stormwater discharges expected to occur from the site. Documentation in the SWPPP of all non-stormwater discharges from the site provides operators with information that will help them to minimize non-stormwater associated pollutant discharges, and to ensure that only authorized non-stormwater discharges occur.

Part III.F.2.e Permit Requirements

Part III.F.2.e requires the SWPPP to identify all sources of allowable non-stormwater discharges listed in Part I.C.2.

Part III.F.2.f: Description of Stormwater Controls

Part III.F.2.f requires operators to include in the SWPPP a description of stormwater controls that will be implemented. Although this Part requires the SWPPP to include details on stormwater controls that will be implemented, departing from the individual design details on the site is not considered a permit violation.

Part III.F.2.g: Procedures for Inspection, Maintenance, and Corrective Action. Describe the procedures you will follow for maintaining your stormwater controls, conducting site inspections, and, where necessary, taking corrective actions, in accordance with Part III.A.1.d, Part III.C, and Part III.D of this permit. Also include:

i. The inspection schedule you will follow, which is based on whether your site is subject to Part III.C.2 or Part III.C.3, or whether your site qualifies for any of the reduced inspection frequencies in Part III.C.4;

ii. If you will be conducting inspections in accordance with the inspection schedule in Part III.C.a, or Part III.C.3, the location of the rain gauge or the address of the weather station you

will be using to obtain rainfall data; and

iii. Any maintenance or inspection checklists or other forms that will be used.

Part III.F.2.h: Staff Training. Include documentation that the required personnel were, or will be, trained in accordance with Part III.E.

Part III.F.2.i: Compliance with Other Requirements.

i. Threatened and Endangered Species Protection. Include documentation required in Part III.A.2.n supporting your eligibility with regard to the protection of threatened and endangered species and designated critical habitat.

ii. Safe Drinking Water Act Underground Injection Control (UIC) Requirements for Certain Subsurface Stormwater Controls. If you are using any of the following stormwater controls at your site, document any contact you have had with the Department for implementing the requirements for underground injection wells in the Safe Drinking Water Act and EPA's implementing regulations at 40 CFR 144 -147. Such controls would generally be considered Class V UIC wells:

iii. Infiltration trenches (if stormwater is directed to any bored, drilled, driven shaft or dug hole that is deeper than its widest surface dimension, or has a subsurface fluid distribution system);

iv. Commercially manufactured pre-cast or pre-built proprietary subsurface detention vaults, chambers, or other devices designed to capture and infiltrate stormwater flow; and

v. Drywells, seepage pits, or improved sinkholes (if stormwater is directed to any bored, drilled, driven shaft or dug hole that is deeper than its widest surface dimension, or has a subsurface fluid distribution system).

Part III.F.2.j: SWPPP Certification. You must sign and date your SWPPP in accordance with Part I.F.5.

Part III.F.2.k: Post-Authorization Additions to the SWPPP. Once you are authorized for coverage under this permit, you must include the following documents as part of your SWPPP:

iv. Any correspondence exchanged between you and the Department related to coverage under this permit;

v. A copy of the acknowledgment letter you receive from the Department assigning your NPDES ID (i.e., permit tracking number);

vi. A copy of this permit (an electronic copy easily available to the stormwater team is also acceptable).

Part III.F.3: On-Site Availability of the SWPPP

Part III.F.3 instructs the operator on the requirements for retaining the SWPPP on-

site. Part III.F.3 Permit Requirements

The operator must keep a current copy of the SWPPP at the site or at an easily accessible location so that it can be made available at the time of an on-site inspection or upon request by the Department, or local agency approving stormwater management plans; or the operator of a storm sewer system receiving discharges from the site.

The Department may provide access to portions of the SWPPP to a member of the public upon request. Confidential Business Information (CBI) will be withheld from the public but may not be withheld from EPA, USFWS, or NMFS. (Note: Information covered by a claim of confidentiality will be disclosed by EPA only to the extent of, and by means of, the procedures set forth in 40 CFR Part 2, Subpart B. In general, submitted information protected by a business confidentiality claim may be disclosed to other employees, officers, or authorized representatives of the United States concerned with implementing the CWA. The authorized representatives, including employees of other executive branch agencies, may review CBI during the course of reviewing draft regulations.)

If an on-site location is unavailable to keep the SWPPP when no personnel are present, notice of the plan's location must be posted near the main entrance of the operator's construction site.

Part III.F.3 requires operators to retain copies of their SWPPP on site, and to make the document available to EPA or the Services immediately upon request. If a member of the public wishes to have access to the non-CBI portions of the operator's SWPPP, they must first contact the Department. The Department may require that a copy be sent to the agency so that it can be provided to the requestor. The mechanism for providing the Department with a copy of the SWPPP is at the discretion of the operator (e.g., web-based, hard copy), though the Department strongly encourages that SWPPPs be provided electronically.

Part III.F.4: Required SWPPP Modifications

Part III.F.4.a: List of Conditions Requiring SWPPP Modification

Part III.F.4.a sets out the conditions requiring the SWPPP to be modified. Part III.F.4.a Permit Requirements
The operator must modify the SWPPP, including the site map(s), within seven (7) days of any of the following conditions:

i. Whenever new operators become active in construction activities on the site, or changes are made to the construction plans, stormwater controls, or other activities at the site that are no longer accurately reflected in the SWPPP. This includes changes made in response to corrective actions triggered under Part 5. The operator is not required to modify the SWPPP if the estimated dates in Part 7.2.3.f change during the course of construction;

ii. To reflect areas on the site map where operational control has been transferred (and the date of transfer) since initiating permit coverage;

iii. If inspections or investigations by the Department or its authorized representatives determine that SWPPP modifications are necessary for compliance with this permit;

iv. Where the Department determines it is necessary to install and/or implement additional controls at the operator's site in order to meet the requirements of this permit, the following must be included in the SWPPP:

- i A copy of any correspondence describing such measures and requirements; and
- ii A description of the controls that will be used to meet such requirements.

v.To reflect any revisions to applicable federal, state, tribal, or local requirements that affect the stormwater controls implemented at the site; and

vi. If applicable, if a change in chemical treatment systems or chemically-enhanced stormwater controls is made, including use of a different treatment chemical, different dosage, or different area of application. The requirement in Part III.F.4.a to maintain a modified SWPPP under any of the conditions listed above provides assurance that the SWPPP will be updated to accurately reflect the conditions on the construction site. It is important that the SWPPP be accurate in terms of changes to construction plans, stormwater controls, changes in operational control, and other important changes on the site, so that the facility personnel have access to a SWPPP that is current, and so that inspectors are provided with accurate site information for compliance purposes.

Part III.F.4.b: SWPPP Modification Records

Part III.F.4.b requires the operator to maintain a record of all SWPPP

modifications. Part III.F.4.b Permit Requirements

The operator must maintain records showing the dates of all SWPPP modifications. The records must include the name of the person authorizing each change (see Part III.F.2.j) and a brief summary of all changes.

The requirement to maintain a record of all SWPPP modifications is to ensure that a record of all of the changes to the SWPPP is kept. Keeping a record of such changes will help facility personnel to stay current with the changes that have been made to the SWPPP, and will allow inspectors to determine if appropriate modifications were made to the SWPPP under the required circumstances.

Part III.F.4.c: Certification Requirements

Part III.F.4.c establishes the certification requirement for SWPPP modifications, as follows: Part III.F.4.3 Permit Requirements
All modifications made to the SWPPP consistent with Part III.F.4 must be authorized by a person identified in Part I.F.5.

The requirement that the SWPPP and all modifications be authorized by a person identified in Part I.F.5 is consistent with standard NPDES permit conditions described in 40 CFR 122.22 and is intended to ensure that the operator certifies any SWPPP modifications.

Part III.F.4.d: Required Notice to Other Operators

Part III.F.4.d specifies the notice requirement for other operators when the SWPPP is modified. Part III.F.4.d Permit Requirements Part III.F.4.d requires operators, upon determining that a modification of the SWPPP is required, if there are multiple operators covered under the permit, to immediately notify any operators who may be impacted by the change to the SWPPP.

The requirement in Part III.F.4.d ensures that any other operators covered under the permit are kept up to date on the SWPPP so that they can comply with the modifications to the pollution prevention plan.

23. Part VI Standard Permit Conditions

The standard permit conditions are included in Maryland's General permits as required by 40 CFR122.41. The conditions include:

A. Duty to Comply
B. Duty to Reapply (found in Part I)
C. Property Rights.
D. Water Construction and Obstruction
E. Right of Entry
F. Duty to Provide Information.
G. Availability of Reports
H. Submitting Additional or Corrected Information
I. Removed Substances
J. Toxic Pollutants
K. Oil and Hazardous Substances Prohibited
L. Proper Operation and Maintenance.
M. Bypass
N. Upset
O. Need to Halt or Reduce Activity Not a Defense.
P. Duty to Mitigate
Q. Permit Actions.
R. Severability.
S. Reopener Clause for Permits
T. Civil and Criminal Liability
U. Action on Violations
V. Civil Penalties for Violations of Permit Conditions.
W. Criminal Penalties for Violations of Permit Conditions.
X. Administrative Penalties for Violations of Permit Conditions.

24. Part V. AUTHORITY TO ISSUE GENERAL NPDES PERMITS

This part confirms Maryland's authority to issue General Permits and is where the Director signs the permit. On September 5, 1974, the Administrator of the EPA approved the proposal submitted by the State of Maryland for the operation of an NPDES permit program for discharges into navigable waters under Section 402 of the federal Clean Water Act, 33 U.S.C. Section 1342. On May 15, 1989, EPA and Maryland entered into a superseding Memorandum of Agreement for such discharges. On September 30, 1990, the Administrator of the EPA approved the proposal submitted by the State of Maryland for the operation of a general permit program. Under the authorizations described above, this general discharge permit serves as both a State

of Maryland general discharge permit and an NPDES general discharge permit.

25. Appendix A – Definitions

Definitions were chosen from either federal and/or state Regulations, the EPA CGP or the previous permit (14-GP) for reference by those regulated by this permit.

26. Appendix B – Stream Protection Zones

The appendix uses the EPA CGP as a basis for defining the extent of a buffer (or Stream Protection Zone). The available options when work is performed with this Stream Protection Zone are derived from the 2011 Handbook. These options and this appendix are not meant to replace the Handbook, but to help clarify the rationale behind the selection of the options. Reference Page 34 (A-4) for the specific options that were included in this Appendix.

27. Appendix C – Antidegradation Checklist

The checklist was developed by selecting all elements in the permit related to Tier II, and including them in a fashion that provides the permittee flexibility to describe the rationale for their selected options. Certain options must be selected, such as the inspection frequency or stabilization rate. Other options have to do with whether the buffer was impacted, and if it was which of the options were chosen. In this way, the permittee can call attention to the features on the approved E&SC plan, and provide documentation for those interested in the project.